

Collectively-owned land in Jiangxi Province. Photo by Yang Xin

PART 2: LAND TENURE

I. Overview

Simply put, *land tenure* is the way in which people have access to and use land and natural resources. A more detailed definition describes land tenure as "the institutional (political, economic, social, and legal) structure that determines (1) how individuals and groups secure access to land and associated . . .resources, including trees, minerals, pasture, and water and (2) who can hold and use these resources—for how long and under what conditions" (USAID, 2010).

Clearly, there are many dimensions to land tenure. It is like a bowl of "spaghetti," consisting of intertwining concepts such as administrative divisions, ownership, use rights, management, enforcement, etc. This part of the book teases apart the elements of the current land tenure system in China, as they relate to land protection efforts, and explains them in digestible portions. For those interested in land protection projects or other transactions involving rural land in China, it is imperative to have a basic understanding of these components.

Before we get started, some foundational principles to bear in mind: First and foremost, this part explains land tenure based on laws as they relate to potential land protection projects in rural China. It provides a foundation to help the reader to understand the basics of land tenure in China. However, anyone actually embarking on a project should consult independent legal advice. Second, it is extremely common throughout China, as in almost all countries, for there to be differences between *de facto* and *de jure* land tenure—what the law allows and what actually occurs on the ground. Laws and policies related to property rights have historically been implemented differently across China. Finally, China has a history of land tenure overhauls that will likely continue into the future, thus complicating any long-term project or program. Therefore, what is true today may not be true 2 years from now, let alone 50 or 100. These overhauls have granted and rescinded ownership and use rights to and from various parties (particularly rural people) for the last century. Since 1978, the trend has been toward granting more, rather than fewer, use rights to households. However, individuals' ability to exercise these rights varies, and because of the history of change, rural people in particular have little if any confidence in laws and regulations that supposedly assure them of security. This longstanding history of tenure insecurity, while improving, still challenges the stability of land rights and complicates land protection efforts.

II. LEGAL FRAMEWORK

The Constitution of the People's Republic of China (P.R.C., 1982 as amended) and legislation based on the Constitution form the legal basis for the land tenure system. Implementation of the legislation and further reforms are carried out through a variety of regulations and policies, which is then coordinated through an elaborate planning system. The **Five-Year Guidelines of the P.R.C.** (formerly called Five-Year Plans) are the major planning documents, which set priorities for economic development, growth targets, and land or other reforms. These documents identify socioeconomic development goals for five-year (or so) blocks of time. China developed the *1st Five-Year Plan* in 1953. It has just finished implementing its eleventh which covered the years 2006-2010; and is now implementing its twelfth, which will cover the years 2011-2015. The 12th Five-Year Guideline seeks to address rising inequality and promote more sustainable growth.

The Central Committee of the Communist Party (CCPCC) Documents also set priorities and guide the implementation of laws and policies. These documents are numbered according to their order of publication within a given year. For example, the first document of the year is "Central Document No. 1" (中央一号文件, zhongyang yíhao wenjían), the second is "Central Document No. 2," and so forth. The "Documents No. 1" have a special status, as they are generally considered to indicate the political priority of central authorities for the year to come. As for land issues, the "Documents No. 1" from 1982-1986 and again from 2004-2010 were dedicated to rural development, and especially to land rights issues. For 2011, "Document No. 1" addresses rural issues for the eighth consecutive year, but it is the first year to highlight and emphasize water conservation and development (CCTV, 2011) (Zhu, J., 2011).

China has also passed a host of **environmentally-related laws** over the last several decades that direct rural land ownership and use. These laws govern land tenure in general, natural resources, and protected areas (Figure 2–1). Although the laws vary widely in their implementation, they provide the basis for opportunities to conserve important landscapes. For example, the Forestry Law and the Grasslands Law describe allowable and prohibited uses in these vegetation types, including but not limited to protection and restoration priorities (see Chapter VIII, Use Rights). Also, protected area laws and regulations describe requirements for establishing and managing nature reserves, forest parks, and other types of protected areas (see Part 3, Land Protection in Practice). Furthermore, the Land Administration Law details requirements for land use planning nationwide, through which the government delineates areas for use and protection (see Chapter VII, Land Use Planning).

Figure 2-1. Major laws and some relevant regulations directing land tenure for rural lands in China¹³

The laws are listed in order of their original effective dates. Where the government has issued amendments, the amendment year is listed. This book references the most recent version of the laws, unless otherwise noted.

Land tenure in general

- Land Administration Law (1986, 1988, 1998, 2004)
- Rural Land Contract Law (2003)
- Property Rights Law (2007)
- The Law on the Mediation and Arbitration of Rural Land Contract Disputes (2010)

Natural resources

- Forestry Law (1984, 1998)
- Grassland Law (1985, 2003)
- Mineral Resources Law (1986, 1996)
- Water Law (1988)
- Environmental Protection Law (1989)
- Law on the Protection of Wildlife (1989)
- Water and Soil Conservation Law (1991)
- Agriculture Law (1993)
- Regulations on Wild Plants Protection (1997)
- Regulations for the Implementation of the Forest Law (2000)
- Law on the Prevention and Control of Desertification (2002)
- Coal Law (2006)
- Renewable Energy Law (2009)
- Law on Island Protection (2009)

Protected areas

- Construction Management Regulations of Scenic Areas (1993)
- Regulations on Nature Reserves (1994)
- Regulations on Forest Park Management (1994)
- Regulations on Scenic Areas (2006)
- [Draft] Natural Heritage Protection Act (2009)¹⁴

Other laws related to land tenure other than for terrestrial resources and rural lands include: Law on Administration of Urban Real Estate (1994) and the Fisheries Law (1986, 2000, 2004)

¹⁴ The August 4, 2009 version is the latest version of which the authors were aware. It is possible that more recent versions exist. This law, if passed, would provide guidance for scenic areas, forest parks, nature reserves, and other protected areas.

III. ADMINISTRATIVE DIVISIONS

The Chinese State (the State) is embodied by the Central Government and is under the leadership of the Communist Party (the Party). ¹⁵ The Central Government technically maintains authority over all administrative divisions in the country, though the Party is in fact the leading authority. All administrative divisions underneath the Central Government are considered "local government." There are three such levels: provincial (省, sheng) (Figure 2–2), county (县, xian), and below-county. Some provinces are also divided into prefectures (州, zhou), which is a fourth type of division that oversees one or more county-level governments (Figure 2–3). This chapter briefly describes the most common components of these divisions; see Chapter VI, Decision-Makers, for a more in-depth description of governance.

There are three main types of **provincial-level** divisions including 22 provinces, 5 autonomous regions, and 4 municipalities. Sample provinces include Yunnan, Gansu, and Jilin. The five autonomous regions (自治区, zizhi qu) are areas associated with one or more ethnic minorities: the Xinjiang Uyghur Autonomous Region, the Inner Mongolia Autonomous Region, the Tibet Autonomous Region, the Ningxia Hui Autonomous Region, and the Guangxi Zhuang Autonomous Region (Chapter X, Other Tenure Factors Affecting Land Protection). The four provincial-level municipalities (直辖市, zhixia shi) include Beijing, Shanghai, Chongqing, and Tianjin.

Technically, Taiwan, Hong Kong, and Macao are also considered provincial-level divisions. Currently China does not exercise effective power over Taiwan, whereas Hong Kong and Macao are *Special Administrative Regions* (SARs). Under China's "one country, two systems" policy the SARs enjoy complete autonomy, with the exception of foreign policy and military defense which are the responsibility of the Central Government.

Provincial-level jurisdictions vary widely in terms of area, population, and economic indicators. For example, not including the provincial-level municipalities, they range in size from Hainan at 34,000 km² (roughly the size of Belgium) to Xinjiang at 1.7 million km² (roughly the size of Alaska). Population densities range from Tibet's 2.7 million inhabitants spread over 1.2 million km² to Jiangsu, which packs 75 million inhabitants into an area of 102,000 km².

Some provinces are divided into *prefectures* ($||\cdot||$, *zhou*). Prefectures oversee two or more counties and/or cities within a province, typically that share common features. For example, ethnic autonomous prefectures usually combine several autonomous counties of the same ethnicity. There are a total of 47 prefectures, 30 of which are autonomous, plus nearly 300 prefecture-level cities.

¹⁵ Preamble of the Constitution



Figure 2-2. Provincial-level divisions [will replace this with a better map].

County-level government and divisions below primarily include counties (县; xian) and autonomous counties (自治县, zizhi xian), county-level cities (县级市s, xianji shi), and city districts (市辖区, shixia qu). There are approximately 2,900 county-level designations in China, roughly half of which are counties.

Immediately below the county level, there are four government divisions: districts (\boxtimes , qu), towns (镇, zhen), townships (乡, xiang), and ethnic townships. Townships are further divided into villages (村, cun). An important distinction between below- and above-county government is the accountability of local leaders to residents. The former holds elections, through which villagers appoint town and township leaders (usually local residents). By contrast, county government and Party leadership are appointed from above, and can be allocated from other regions (Menzies, 2011). Thus, below-county leaders are more accountable to residents, and will be sure that their needs are met through land protection projects. A difference amongst the below-county divisions is that districts (\boxtimes , qu) and towns (\mathfrak{E} , zhen) are considered urban, while

townships (\$\mathbe{9}, xiang)\$ are rural. The rural/urban distinction roughly correlates to agricultural/non-agricultural lands, which is important to land protection efforts because it determines the bundle of property and other rights allowed to different individuals through individual residence permits (\$\bar{P}\Boxed_n, hukou\$, see Chapter VIII, Use Rights). The below-county divisions can be interspersed; for example, Dengfeng City of Henan Province is a county-level city containing eight towns and four townships.

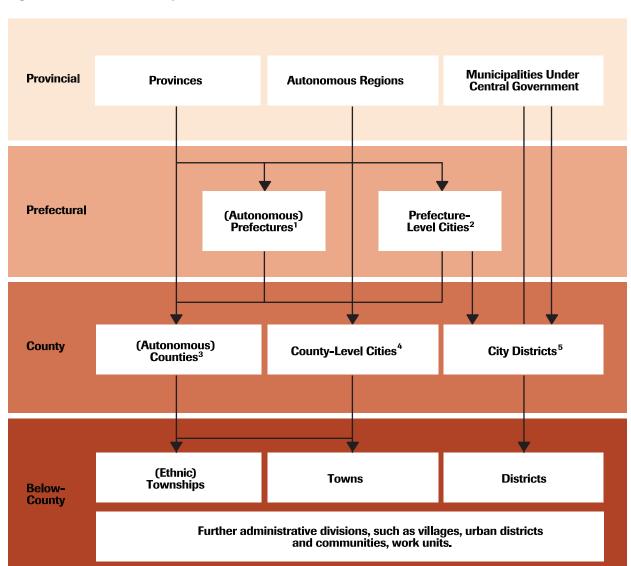


Figure 2-3. Administrative jurisdictions in mainland China

¹ For the Illi Kazakh Autonomous Prefecture, two additional sub-prefectures exist above the county level.

² Prefecture-level cities include both rural and urban territories.

³ There are very few counties directly underneath provincial government.

⁴ County-level cities within a municipality under the Central Government exist only in Chongging Municipality.

⁵ City districts can have multi-level sub-district systems.

Figure 2–4. Collectively-owned lands are managed by one or more villages, such as the Shigu Village area in Yunnan. Photo by Ami Vitale



IV. LAND OWNERSHIP

There are two types of land ownership in China: state and collective (国家所有, guojia suoyou and 集体所有, jiti suoyou). Constitutionally, all land in China belongs to "the people" (人民, renmin), so theoretically, land cannot be owned privately. Instead, use rights to state and collectively-owned lands are allocated to groups, individuals, or other entities, typically for 30-70 years (see Chapter VIII, Use Rights). As of 1996, state lands totaled 53% and collectively-owned lands totaled 46%; ownership was not determined for the remaining 1%, comprised mostly of pasture, forests, and unused lands (Ho & Lin, 2003). Collective ownership encompasses nearly all of the cultivated land (94%) and most of the forest (58%) (Figure 2–5) (Qian et al., 2004) (Zhu K., 2011).

Typically, one or more villages manage collectively-owned lands (Figure 2–4) (Chapter VI, Decision-Makers). The Constitution and legislation have yet to clarify exactly what constitutes a collective, leading to considerable confusion and conflict in land rights disputes (Menzies, 2011). Collective ownership is indefinite though the State retains the power of eminent domain (Zhu K., 2011). As the Constitution states, "The State may in the public interest take over land for its use in accordance with the law." ¹⁶

Technically, the Constitution and the Land Administration Law distinguish between state and collective ownership of rural, suburban, and urban lands, versus ownership of natural resources. However, ownership is often unclear due to ambiguities and apparent contradictions in the laws and on-the-ground realities. According to law, the State can own land anywhere in the country and is the sole owner of urban land, while collectives can own land in suburban and rural areas.¹⁷ As for natural resources, the State owns "[m]ineral resources, waters, forests, mountains, grassland, unreclaimed land, beaches and other natural resources . . .with the exception of [those] that are owned by collectives . . . "18 The laws are confusing on two fronts. First, in reality, natural resources and land overlap with each other, so it may not be clear whether a given parcel in a rural area and the natural resources within it are under state and/or collective ownership. Second, the boundaries between rural/suburban/urban lands are not always clear; in fact, China is urbanizing so quickly that sometimes urban boundaries expand and surround collective land. Thus, these seemingly contradictory provisions beg the questions of whether and how land is registered in China, how often disputes occur, and how they are resolved. Later chapters provide answers to these questions. In short, registration is limited but increasing, and the resolution of disputes can often be open to manipulation, factionalism, or influence by the most powerful people or institutions (see Chapter IX, Tenure Security and Enforcement).

¹⁶ Constitution Article 10

¹⁷ Constitution Article 10, Land Administration Law Article 8, Property Law Article 47

¹⁸ Constitution Article 9, Property Law Article 48. Grassland Law Article 9 states that the State owns grasslands (except those owned by collectives) and the Forestry Law Article 3 states the same for forest resources.



Figure 2-5. Collective forest area ownership by province (Miao and West, 2004)

V. Tenure reform

"Give it today and take it back tomorrow."

— Chinese epigram critiquing changes in forest property rights (Grinspoon, 2002)

China is no stranger to redistributions of land and use rights; major land reforms have swept the nation for the past century. Understanding China's land reform history and trends provides important context for protection efforts. The last 60 years have witnessed particularly significant transitions in both urban and rural land policies, as the government has experimented with different tenure schemes for cultivated lands, forests, and grasslands to increase their productivity and improve local livelihoods. Starting with the rise of the Communist Party, initially under the leadership of Chairman Mao Zhedong, there have been three major waves of reforms.¹⁹ In very general terms, they include (Figure 2-6):

- 1. **Private ownership (1930s/1940s to early/mid 1950s):** The State granted individuals full ownership of agricultural land and forest land within this time period, also known as Mao's First Land Reform. Private property rights were not instated for grasslands, which were still managed as a common property resource.
- 2. Collectivization/No individual rights (early/mid 1950s to late 1970s): The State rescinded ownership rights of individuals for agricultural lands, forests, and grasslands through collectivization.
- 3. **Decollectivization/Private and increasing use rights (late 1970s to present):** The State granted individuals limited and short-term use rights, but not ownership, during a period of initial decollectivization in the late 1970s to mid-1980s. Since that time, the State generally has been increasing use rights granted to individuals with the exception of forests during the 1980s and 1990s. During that period, the State exerted significant control over timber harvest and other forest activities in response to the mass deforestation that occurred after use rights to forests were first distributed to households in the early 1980s.

Thus, for the last 30 years individuals have, for the most part, enjoyed increasing use rights which are heading in the general direction of privatization, though there is significant uncertainty regarding the term "privatization" due to political and ideological factors.

¹⁹ There is some debate about the number of reforms that have occurred. One could argue, for example, that the third reform period could be split into two, with the third occurring during initial decollectivization, and the fourth occurring afterwards and through the present.

The government has implemented these reforms differently across land uses such as agricultural lands, forests, grasslands, residential lands, and urban lands; there are also differences across ethnic minority regions (see Chapter X, Other Tenure Factors Affecting Land Protection). The reforms have had varying degrees of success in terms of improving productivity and benefiting local livelihoods, with the agricultural reform as the most successful. In fact, China boasts the greatest poverty-alleviation achievement in the world in the last 30 years, primarily because of the land reform that granted farmers certain use rights in the late 1970s and 1980s (Ravallion & Chen, 2004) (Zhu & Prosterman, 2007).

A key lesson emerges from all of China's various land reform efforts: Tenure security is fundamentally important to improved land management. So long as people are confident that they will have the right to use, dispose of, and make decisions about using the land, it is more likely that land and natural resources will be managed for long-term productivity. For this reason, the current trend is to grant longer-term use rights and increasing types of rights to households and individuals. This is a step in the right direction, but implementation of the law, and especially creation and enforcement of contracts, remains major challenges. Abuses of land use rights remain common (see Chapter VIII, Use Rights and Chapter IX, Tenure Security and Enforcement).

The remainder of this chapter begins with a discussion of agricultural reform because it has set the trend for the reform of other land uses. It then describes forest tenure reform and grassland tenure reform because they are highly relevant to land protection efforts aimed at conserving biodiversity. At present, the Central Government is concentrating reform efforts on forests.

Figure 2-6. Summary-Waves of land tenure reforms in China for agricultural lands, forests, and grasslands

Private ownership
Collectivization: No or few private use rights
Decollectivization: Private and generally increasing use rights

1930 1940 1950 1960 1970 1980 1990 2000 2010

AGRICULTURAL (CULTIVATED) LANDS					
Private ownership: Use rights are transferred from landlords to tenants, who receive full ownership.					
Collectivization/No private use rights: Household use rights are rescinded through collectivization.					
Decollectivization/Private and increasing use rights: Collectives grant use rights to households through Household Responsibility System (HRS). Laws increase types of use rights and seek to enhance tenure security.					
FORESTS					
Private ownership: Most forest rights are privately owned.					
Collectivization/No private use rights: Use rights are rescinded through collectivization, which lasts through the Cultural Revolution.					
Decollectivization/Private and increasing use rights: Collectives distribute use rights to households as an extension of the H.R.S.Following mass deforestation, the State institutes strict controls on timber harvest, and has been restoring and increasing them since the early 2000's through collective and state reform.	_				
GRASSLANDS					
Communal management: Grasslands are managed by nomadic herders as a common property resource.					
Collectivization/No private use rights: Management responsibility shifts to communes.					
Decollectivization/Private and increasing use rights: Collectives distribute land and livestock to households					

A. Agricultural Reform

"Agricultural" in this context means cultivated land. After 32 years of relative turmoil under collective management from 1956-1978, the government started transferring use rights to households. The trend has been towards increased land use rights and improved livelihoods.

i. Past

Private ownership—One of the first actions the Communist authorities took in areas that came under their control was to initiate Chairman Mao's first massive land reform. It transferred use rights from landlords to tenant farmers and resulted in the deaths of hundreds of thousands, if not millions, of landlords. Farmers were given full private ownership, and by 1952, nearly half of all agricultural land was redistributed to approximately 60% of China's farmers or 300 million people (Vendryes, 2010). The reform started at different times in different places; for example, in Jinggangshan City in Jiangxi Province and Yanan City in Shaanxi Province, it started in the late 1930s or early 1940s, whereas in some parts of Yunnan and Hainan Provinces, it started in the early 1950s (Menzies, 2011).

Collectivization/No private use rights—Beginning as early as 1951, there were successive phases of collectivization characterized by different forms of cooperatives. By 1956, Mao issued a call for wide-reaching collectivization, creating large agricultural communes, and extinguishing all individual or household property rights in favor of collective control. The land reform associated with this initiative, known as the Great Leap Forward, aimed to transform China into an agrarian and egalitarian economy by creating collective farming and large agricultural communes, with collectively-controlled property rights. Unfortunately, farm productivity plunged. From 1958-1961, thirty million people died of starvation (Dikotter, 2010), and collectivization was associated with the disastrous policies of the Great Leap Forward (1958-1961). Following the Great Leap Forward, the structure and management of communes were adjusted several times, but by the late 1970s, persistent problems with production remained. The government started forming smaller collective units in hopes they would be more likely to invest in the land and increase productivity.

Decollectivization/Private use rights—By 1978, based on experiments to lease farmland to households, the Central Government moved back to household-based agricultural production, instituting the Household Responsibility System (HRS) (Menzies, 2011) (Ash, 1988). Under the HRS, collectives transferred use rights—though not ownership—to individual households for three-year blocks of time. In addition, households gained the right to the residual profit on agricultural yields, which was considered the single most important factor in the success of land reforms in the early 1980s (Lin, 1992) (Vendryes, 2010). Also, "Document No. 1" in 1984 gave households the right to subcontract land to other parties, though few did so until years later. As a result of these changes, productivity increased rapidly at first but then stagnated, in part because of tenure uncertainty. With only three-year use rights, farmers had limited incentive to make major investments in their agricultural plots. Also, the use rights were subject to frequent changes through land readjustments, which collectives initiated in order to ensure equality amongst their members.

ii. Present

Increasing private use rights—For the last 20 years, the government has taken steps toward increasing the security of use rights with the intent of increasing agricultural productivity and improving peasants' livelihoods. In 1993, the State gave managers of collective lands the option (though not the requirement) of granting farmers 30-year use rights (Figure 2–7). In 1998, the Land Administration Law actually *required* the granting of 30-year use rights through written contracts. The Rural Land Contracting Law (2002) further delineated farmers' rights, the contents for written contracts, and dispute resolution procedures. It also reiterated farmers' ability to circulate land use rights to third parties, through "subcontract, lease, exchange, or swap." In 2008, the "new" rural reform policy reiterated the principles laid out in the 2002 law, though it received much greater publicity (Zhu K., 2011) (Prosterman & Zhu, 2009) (Rural Development Institute, 2010).

Figure 2–7. Today, farmers such as these rice and tobacco farmers near Lijiang, Yunnan, enjoy 30-year use rights to cultivated lands. Photo by Ami Vitale



B. Forest Reform

Compared with agricultural land reform, forest reform arguably has been much more complicated and less successful in improving land management and local livelihoods. The current reform is attempting to bring the forest sector "up to date" with the agricultural sector (Xu et al., 2010). Past reforms dealt primarily with collective forests, while current reform is addressing both collective and state-owned forests.

i. Past

Private ownership—During Mao's First Land Reform (1949-1952), households received ownership rights for trees and forested mountainsides (Grinspoon, 2002). Approximately 10 years later, these rights were reversed.

Collectivization/No private use rights (with a brief interlude of some private use rights)—By the end of the Great Leap Forward in 1961, the State had rescinded all ownership and use rights from individuals and either kept forests in state ownership or gave them to communes. At the same time, the State instituted a massive campaign to produce iron and steel for construction projects. Villages and even households were told to produce steel. This campaign led to severe deforestation as forests were cut to supply fuel (wood or charcoal). In coal-mining areas, trees were cut to provide timber for props in the mines (Menzies, 2011). In some locales, workers clear-cut forests without regard for property rights.

Peasants enjoyed some restored use rights to private forest plots during a few years of retrenchment from 1961-1964. However, these were lost during the Cultural Revolution, which was Chairman Mao and the Communist Party's effort to cement socialism through major political, economic, and social reforms from 1966-1978 (Grinspoon, 2002). During this time of extreme social upheaval, according to one village leader, "No one managed forests . . . [it was a time] of fierce struggle, uproar, and confusion." As Grinspoon (2002) notes, "Villagers were concerned with survival—not forest management."

Decollectivization/Private use rights—The de-collectivization of agricultural lands through the Household Responsibility System was so successful that the State extended it to forests. In 1981, the State issued the "Resolution on Issues Concerning Forest Protection and Development," also known as the "Three Fixes Policy," to "fix forest landownership, fix ownership of use rights to mountains, and fix responsibility for forest management" (Liu, 2009). This policy authorized collectives to allocate forest use rights to households on a contractual basis in order to increase forest coverage and improve local livelihoods. Experts disagree as to how large an area was shifted from collective to private management as a result of the Three Fixes Policy. According to one author, an average of 69% of collective forests were transferred to individuals by 1986 (Lu et al., 2002); another author states that 95% of collectively owned forest farms implemented the policy by 1984 (Wen, 2009); and a third asserts that by the mid-1980s, the six provinces with the most collective ownership had allocated use rights to more than 70% of their forests to households (Xu et al., 2010).

Amount aside, the transfer of use rights had unintended and devastating consequences: Households felled timber across vast tracts of collective forest land. There were several causes of this widespread deforestation including tenure uncertainty (which caused households to seek short-term profits), deregulation of forest harvesting, and a growing demand for timber with the beginning of the economic boom. There was widespread belief that the State would rescind the rights it had just given (which is exactly what it did), thus reinforcing the uncertainty and lack of confidence in government land policy. Thus, there was little incentive for households to make long-term investments in tree planting and forest management (Menzies, 2011).

Restricted use rights—In response to these impacts, by the mid-1980s the State instituted strict controls on timber harvest through a permit system and, technically, rescinded household use rights. This action marks a distinct difference between forest tenure reform and agricultural tenure reform, through which use rights of individuals have increased steadily throughout the third wave of land reforms. The next 20 years of strict forest control fomented frustration among rural people, and protests became more frequent. Change was needed.

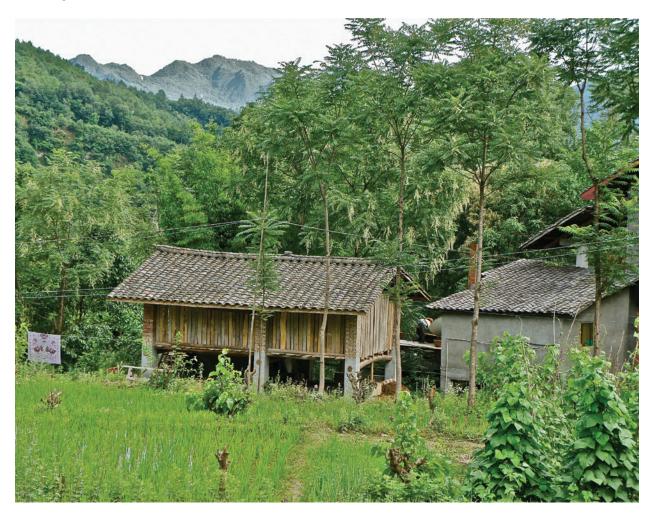
ii. Present

Increasing private use rights—In today's China, at the national policy level, there are three major and sometimes competing objectives for the forestry sector: (1) promoting the growth of the forestry industry to satisfy the demand for timber and other forestry products; (2) reducing tenure insecurity and clarifying rights for hundreds of millions of rural people who depend on forestry as a source of livelihood, in order to promote private investment and effective management; and (3) preserving the quantity and quality of forests to ensure an ecologically sustainable environment for the nation (CPC Central Committee and State Council, 2008). Since the late 1990s, China has adopted a series of initiatives and programs to meet these objectives by reforming both state- and collectively-owned forests.

The most prominent initiative towards the objectives of enlarging the forestry industry and reducing tenure insecurity is the "collective forestry tenure reform" (Figure 2–8). This current reform is basically the resurrection of the reform measures instituted from the early- to mid-1980s. Collective forestry tenure reform started in 2003 in a handful of provinces (Fujian, Jiangxi, Zhejiang & Liaoning) and was expanded to the rest of the country in 2008. It should be completed by 2013, according to a 2008 policy announcement (Central Committee and State Council, 2008). Under it, collectively-owned and managed forestland and forests are being distributed to individual households. Post-distribution, farm households enjoy ownership rights over forests (i.e., the trees and vegetation) and use rights of 30 to 70 years over forestland. Several recent laws have improved the scope of "use rights," to include the right to occupy, manage, develop, transfer, and profit from the distributed forestland. A forestland rights certificate is issued to each household to confirm these rights as well as the size and location of the underlying forestland (see Chapter VIII, Use Rights).

²⁰ Rural Land Contracting Law (2002), Property Rights Law (2007)

Figure 2–8. The collective forestry tenure reform distributes the use rights from collective forestland to individual households, such as the one shown here in Mingzhu Village, Sichuan. Photo by Steve Blake



A second front of the reform deals with state-owned forests. This front follows the same pattern of decentralization and devolution as the collective forestry tenure reform, in that both involve efforts to move forest management and decision-making closer to the people who, in one way or another, depend on the forests or interact with them regularly. Historically, state-owned forest farms and enterprises have suffered from low productivity and ineffective bureaucracy, and most of them have become financially unsustainable. They suffered another blow when a large-scale forest logging ban was instituted in the 1990s thus reducing harvests (see Part 1, Lay of the Land).

As a result, a small number of state-owned forest farms have begun the "dismantling" process in which forestland is distributed and leased to former employees. In Yichun (a city in northeastern China), a pilot program has been hailed as the reform model—each employee's family leases about 10 hectares of forestland for a term of up to 50 years and pays annual rent to the State (about 40 RMB per hectare per year); in exchange, the employee receives rights to develop and

manage the forest, similar to what farm households receive in collective forestry tenure reform (Xinhuanet.com, 2006). This model has been sanctioned by the Central Government and will soon roll out to other areas.

Additionally, rules have been relaxed so that many types of private transactions involving forestland and forests are now permissible. For instance, in Fujian and Jiangxi provinces, households may use their rights to collective forestland and forests as collateral for bank loans. Another emerging trend is that large corporations and multi-national companies such as Stora Enso, Weyerhaeuser, Asia Pulp and Paper Co. have begun to lease large amounts of collective and state forestland for pulp or timber production, often with encouragement and help from local governments.

In the past three decades of the reform era, China has made substantial progress in the forest sector. Current reforms and initiatives, however, still face many great challenges. First, tenure insecurity remains a serious problem. As farmers or state forest farm employees become forest operators, their rights are often ambiguous and susceptible to interferences or threats from village or state forest farms who still own the underlying forestland. Use rights need to be further clarified and strengthened so that individuals have greater confidence in the security of their tenure and thereby make long-term investments in the forests. In addition, a large number of farm families have yet to receive forestland rights certificates, a task that will require serious government effort (Zhu K., 2011) (see Chapter VIII, Use Rights and Chapter IX, Tenure Security and Enforcement).

In addition to addressing tenure security, the logging quota system needs to be reformed. Individuals and companies must obtain a logging permit to harvest trees (with some rare exceptions). The Central Government decides on the overall logging quota each year, but demand far exceeds the permissible quota (see Part 1, Lay of the Land). Because there is little accountability and transparency in quota distribution, the process has become a rent-seeking tool for local forestry officials and agencies in many regions. Additionally the system leads to illegal logging.

A related issue arises from the Natural Forest Protection Program (NFPP) logging bans. While the collective forest tenure reform and the state-owned forest farm reform are intended to make farmers or employees true "owners" and operators of forests, in NFPP forests the government does not compensate affected operators for their lost rights to harvest trees and otherwise economically benefit from the land. The objectives of the tenure reforms and the NFPP program must be reconciled, and the logging quota system needs to be changed to accommodate these competing considerations. Otherwise, the effectiveness of the reforms could be seriously undermined (Zhu K., 2011).

C. Grassland Reform

The transfer of grassland rights to households (rather than to villages or small groups of households) has been much less common and has occurred much more slowly than the transfer of agricultural and forest rights—and with arguably disastrous consequences for the local people and the landscape (Menzies, 2011).

i. Past

Management as a common property resource—China's grasslands are home to 39 million people, many of whom are minority pastoralists (Williams, 2002). Since grasslands lie mostly in minority areas, they have been regarded very differently from agricultural and forest lands—as "wasted land," in fact. "To central authorities," writes Williams (2002), "even marginal farmland was better than natural pasture." Thus, from the 1950s to the 1980s, government policy was focused on settling Han farmers in grasslands and converting them to agricultural land (Menzies, 2011). The first wave of land reforms, which transferred forests and agricultural lands from landlords to tenants, did not affect to grasslands in the same manner. Instead, grasslands were managed by nomadic herders as a common property resource until the era of collectivization (Williams, 2002).

Collectivization/No private use rights—During collectivization, herding households were forced to curtail their nomadic lifestyles and settle into communities (Williams, 2002). At the same time, guidance from the Central Government allowed the allocation of grassland use rights to communes. Modern Chinese law made its first mention of grassland use rights in the Rangeland Regulations of Inner Mongolia (1965). Then in 1975, the Central Government extended the regulations to 11 provincial-level governments to allow the allocation of use rights to communes, but not individuals (Ho, 2001).

ii. Present

Decollectivization/Private use rights—By the early 1980s, the rural land reforms that started with cultivated land had spread to pastoral regions, and in 1985 the Central Government adopted the Grassland Law. Individual households acquired livestock formerly owned by the communes, while the government reorganized communal forms of land ownership and tenure. Use rights to the land itself were, for the most part, allocated to the administrative or natural village (collective tenure) or to small groups of households that were often related (group tenure). The Central Government has also been accelerating the replacement of traditional pastoral people with commercial livestock operations.

²¹ "Han Chinese" refers to the decedents of the early Chinese dynasties. The majority of China's population is considered to be Han (see Chapter X, Other Tenure Factors Affecting Land Protection).

Reports vary regarding transfers of grassland use rights to households (Figure 2–9). As of 2003, official statistics claimed that the major pastoral provinces such as Inner Mongolia and Xinjiang had transferred most grassland use rights to households. However, studies show that in many parts of western China, household tenure "remains the exception rather than the rule" (Banks et al., 2003). In some places, the tenure arrangement varies by seasonal use. For example, in western Sichuan it is common for groups of households to share summer pastures while individual households manage winter pastures.

In any case, as a result of decollectivization, grassland households were fixed to specific plots of land for the first time in history, with detrimental impacts to the landscape and local people (Williams, 2002). Unlike foresters and farmers, private tenure was a new concept for herding households. Private enclosures became common as households or groups of households attempted to exclude others' animals. With the enclosures, a host of ecological and social challenges have emerged. For example, socioeconomic gaps have widened between households who can afford fences and those who cannot. Households who can afford fencing tend to graze their livestock outside of their enclosures as long as forage is available on the open range; thus, they "pick clean the grass of those too poor to fence, saving their own for hay production or emergency grazing during winter and spring" (Williams, 2002). According to Williams (2002), "Every last household manager that I interviewed asserted that the productive capacity of unenclosed rangeland has declined significantly since privatization." Households with lesser means have been further challenged by local policies, such as those in at least one area of Inner Mongolia, requiring that land be productively managed or confiscated and redistributed to households capable of doing so. As a result of this production pressure, desertification has also become a major ecological issue (see Part 1, Lay of the Land). "Mud rain" and dust storms in Beijing are often attributed to the improper use of grasslands in nearby Inner Mongolia (Williams, 2002).

Given these challenges, group rights arrangements could result in more sustainable grassland management than individual household arrangements. A key to success is the enforcement of stocking rates. The problem is that while some county agricultural bureaus set stocking rates, rarely do they monitor and enforce them. Thus, if villages or groups of households jointly manage pasture lands, the "tragedy of the commons" can prevail and grassland resources can become depleted. But if and when stocking rates are better regulated, continued management by villages or groups of households may be the best arrangement for grassland viability and individual benefits (Banks et al., 2003). Group tenure arrangements can provide more equal access to higher quality pastoral resources, particularly where the distribution of forage and water varies greatly across the landscape. Group arrangements may also allow for fewer kilometers of fencing than if individual households fenced their plots, which is more cost-effective and better for wildlife. Finally, they can allow for more flexibility and better herd management in terms of moving cattle across the landscape based on the available forage and water (Banks et al., 2003) (Ho, 2000).

Figure 2–9. Reports vary regarding the transfer of grasslands to individuals, such as to this Tibetan herder in Qinghai. Photo by Li Baoming



VI. DECISION-MAKERS

Any project affecting land use in China will inevitably involve a myriad of government agencies; collective land managers; companies, individuals, and/or other use right holders. The array of potential players can seem overwhelming. This chapter attempts to enhance the readers' understanding of the players most likely to be involved in land conservation transactions. Because the government is such a significant player in determining Chinese land tenure, this chapter also provides a primer on government structure.

A. Government

Two entities work in tandem to govern China: the Communist Party of China (CPC) and the Central Government. As a single-party state, the CPC handles general strategic direction, provides leadership in formulating national policies, and controls employment for government positions. The Central Government formulates and executes policy. According to Zhao (2010), the CPC is primarily focused on economics and civil affairs, and less so on environmental issues. Therefore, the Central Government may play a bigger role in land use decisions and policy formation, though there is no question that the CPC and the Central Government are intertwined. The most obvious link is that "Paramount Leader" of the country (currently Hu Jintao) serves dual roles as the President of the Central Government and the General Secretary of the CPC. ²² Furthermore, policy approval involves both the Central Government and the CPC. The State Council (within the Central Government) formulates policies; the CPC's Central Committee (the "workhorse" of the Party) reviews and endorses the State Council's recommendations; and then the National People's Congress (also within the Central Government) considers them for approval.²³

The State Council, which is headed by the Premier²⁴ (currently Wen Jiabao), develops and implements laws through the 90 or so agencies that it manages. The agencies most frequently involved in land use decisions include:

Ministry of Land and Resources—Responsible for the planning, administration, protection and "rational utilization" of land, marine, mineral, and other natural resources, and for administering the conversion between different land uses. The State Oceanic Administration under its supervision is responsible for designation and management of marine protected areas, including some coastal wetlands.

²² The General Secretary is the highest-ranking official within the CPC. The Paramount Leader also serves a third role, as Chairman of the Central Military Commission.

²³ The National People's Congress is the highest power of the State and consists of up to 3,000 individuals from provincial-level government, militaries, and minority groups. The NPC meets once a year and typically follows the recommendations of the State Council (Zhao, 2010).

²⁴ The titles "Premier" and "Prime Minister" may be used interchangeably.

- **Ministry of Agriculture**—Responsible for the management and development of agricultural resources such as arable land, fisheries, grasslands, beaches, and wetlands which are "suitable for agriculture." Also responsible for the management of nature reserves that protect aquatic wildlife resources.
- **State Forestry Administration**—Responsible for the management of forests, wetlands, deserts. Also manages protected areas including all forest parks, and some nature reserves, wetland parks, etc. Responsible for implementing afforestation and anti-desertification initiatives.
- Ministry of Housing and Rural-Urban Development—Responsible for the management of construction lands and the construction market for housing, commercial and other development, well as some protected areas such as National Scenic Areas and World Heritage Sites. Formerly known as the Ministry of Construction.
- Ministry of Environmental Protection—Responsible for the supervision and coordination of ecological protection including the development of ecological protection plans, the assessment of environmental quality, the monitoring of natural resource exploitation activities that may pose risk to ecological quality, and the monitoring of ecological reconstruction and the restoration of damaged ecosystems—particularly as related to pollution. MEP also provides overall coordination of the designation and management of national nature reserves, as well as management of some nature reserves directly under its jurisdiction.

Other agencies with potential involvement in land use decisions include the Chinese Academy of Science, Ministry of Railways, Ministry of Transportation, Ministry of Water Resources, the National Development and Reform Commission (NDRC), and the National Bureau of Energy. The NDRC formulates strategic economic and development goals and plans for the country, including for sustainable development, through the Five-Year Guidelines and other mechanisms. A number of other agencies also relate to natural resources and include the State Administration of Grain, the State Bureau of Surveying and Mapping, the State Oceanic Administration, and the National Natural Science Foundation.

Several factors determine which agencies are likely to be involved in land use-related policies and projects: current natural land cover, current and potential land use, and protected area designation (Table 2–1). For any one plot of land, multiple agencies may be involved in land use decisions. For example, the following agencies may be involved in land use decisions affecting a nature reserve, grassland vegetation and roads: Ministry of Agriculture, State Forestry Administration, Ministry of Environmental Protection, Ministry of Land and Resources, the Chinese Academy of Sciences, and the Ministry of Transportation.

Table 2-1. Agencies commonly involved with land use decisions

	Agencies commonly involved with land used decisions			Other agencies						
Factors determining agency involvement	Ministry of Agriculture	State Forestry Administration	Ministry of Environmental Protection	Ministry of Land and Resources	Ministry of Housing & Urban-Rural Devel.	Chinese Academy of Sciences	National Development & Reform Commission	Ministry of Transportation	Ministry of Railways	Ministry of Water Resources
Natural land cover (m	ajor typ	es)								
Deserts		Х								
Forests		Х								
Grasslands ²⁵	Χ	Х								
Rivers and streams										Х
Wetlands		Х								
Land use										
Cultivated land	Χ									
Energy development				X			Х			
Forests		Х								
Grasslands/pasture	Χ									
Mining				Х						
Orchards and Nurseries	Χ	X								
Residential and industrial					Х		Х			
Transportation								Х	Х	
Unused lands				Х			Х			
Other										
Protected areas										
Biosphere Reserves		Х			Х					
Forest Parks		Х								
National Parks ²⁶		Х	Х							
Nature Reserves	Х	Х	Х	Х		Х				
Scenic Areas					Х					
World Heritage Sites					Х	Х				

^{*} The list includes major types of terrestrial protected areas only; see Part 3, Land Protection.

²⁵ The State Council makes decisions about state-owned grasslands.

²⁶ National Park designation is in a pilot stage. There is no centralized guidance for National Parks at present, and SFA and MEP have both played a role in the creation of China's two existing National Parks. See Part 3, Land Protection Tools.

Each agency maintains offices at each level of government below it, including a provincial bureau, prefectural bureaus (where they exist), and county bureaus (Figure 2–10). County bureaus have the vast majority of responsibility for land management and administration. Below-county jurisdictions such as towns, townships, and villages do not have their own bureaus per se, though towns at least have offices responsible for bureau activities, such as planning. Each government bureau reports to the level above it. For example, the Pingwu County Forestry Bureau reports to Mianyang City Forestry Bureau, which reports to the Sichuan Provincial Forestry Bureau, which reports to the State Forestry Administration. Thus, typically the county would be the primary level of government involved in land protection projects, but review and approval of potential projects by the other levels of government is also likely.

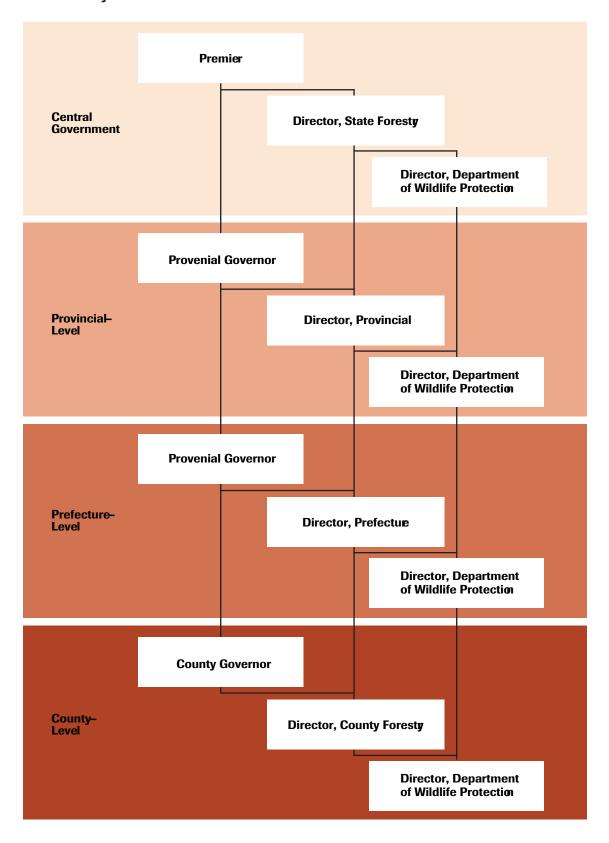
Figure 2-10. Examples of agencies at different levels of government

Level of government	Forestry agency	Environmental protection agency	Land & resources agency
Central	State Forestry Administration (SFA)	Ministry of Environmental Protection (MEP)	Ministry of Land & Resources
Province	Provincial Forestry Bureau	Provincial Environmental Bureau	Provincial Land & Resources Bureau
Prefecture*	Prefectural Forestry Bureau	Prefectural Environmental Bureau	Prefectural Land & Resources Bureau
County	County Forestry Bureau	County Environmental Bureau	County Land & Resources Bureau

^{*} Prefectures do not exist within all provinces.

Key decision-makers include the agency leadership at each level of government and the heads of local government (e.g., Provincial Governor). Agency leadership is focused on technical issues such as environmental protection, while the local government (i.e., administrative) leadership is focused on economic growth and maintaining social order. The director of each agency answers to at least two different people in a "matrix" reporting structure—the director of the agency at the level above and the head of the government at the relevant level. Typically within each level of government (provincial, prefectural, or county) each agency has a director, vice-directors that oversee multiple bureaus, bureau heads, etc. In addition, the Premier and the heads of local government (e.g., Provincial Governor) can also play important roles in agency decision-making. For example, the director of a provincial forestry bureau would answer to the head of the State Forestry Administration as well as to the provincial governor. Similarly, the head of a county forestry bureau would answer to the director of the prefecture forestry bureau and the prefecture governor. Where prefectures do not exist, the county would report up to the province (Figure 2–11).

Figure 2–11. Sample simplified reporting relationships at different levels of government, State Forestry Administration



B. Collective Land Managers

The individuals with decision-making authority over collectively-owned lands can vary from place to place. In general practice, one or more villages or sub-villages manages collectively-owned lands and distributes use rights to villagers for farming, residence, forest use, or other purposes (see Chapter IV, Land Ownership).

The names of administration units for collective lands have changed over time. During the Great Leap Forward, the State aggregated agricultural cooperatives into massive people's communes and instituted a three-level system of ownership and production including communities, brigades, and production teams (Grinspoon, 2002). Upon decollectivization in the 1980s, the commune became the present-day township/town (乡, xiang/镇, zhen), the brigade became the administrative village (行政村, xingzheng cun), and the team became the natural village (自然村, ziran cun) and the villagers' group (村民小组, cunmin xiaozu) (Figure 2–12) (Ho, 2001). Townships/towns encompass multiple administrative villages, which in turn encompass multiple natural villages.

Figure 2–12. Change in names of collective land administration (Liu D., 2001) (Ho, 2001)

Collectivization (mid/late 1950s- late 1970s/early 1980s)	Decollectivization (late 1970s/early 1980s-present)		
Commune	\rightarrow	Town/township	
Production brigade	\rightarrow	Administrative village	
Production team	\rightarrow	Natural village and villagers' group	

Modern Chinese law is not clear about which of these levels—township/town, administrative village, or natural village and villagers' groups—actually owns and manages the land. In 1962, the Eighth National Party Congress made a clear statement in the "60 Articles" that the production team was the owner of collective lands. However, that clarity disappeared upon decollectivization and the associated invalidation of the term "production team." The Land Administration Law mentions two potential owners—the village collective organization and the villagers' committee.²⁷

In practice, the administrative village most frequently forms a villagers' committee, which exercises ownership rights and is the key decision-maker for collectively-owned lands. The Organic Law of the Villagers Committees (1998) states that the town or township proposes the establishment of these three-to-seven-member bodies and the lands under their jurisdiction, and makes them responsible for land management. According to the law, "The villagers committee shall . . . administer the affairs concerning the land . . . owned collectively by the peasants of the village and disseminate knowledge among the villagers about rational utilization of the natural resources and protection and improvement of the ecological environment" (italics added).

²⁷ Land Administration Law Article 10

²⁸ Organic Law of the Villagers Committees Article 8

²⁹ Organic Law of the Villagers Committees Article 5

The villagers elect the committee once every three years via secret ballot, which suggests that committee members make land management and land protection decisions in accordance with community interests.

C. Holders of Use Rights

While all land lies in state and collective ownership, the State and managers of collectively-owned lands (typically villagers' committees) can decide whether and how to transfer use rights for their respective lands to various parties. Technically, these transactions require documentation such as contracts, as subsequent chapters describe. The State can transfer use rights to anyone such as collective land managers (i.e, for the right to use state land in addition to the collectively-owned land), state- or private-owned enterprises, and individuals. Collective land managers can transfer use rights to households or other entities for farming, housing, or other purposes. Collective land managers and households can, in turn, circulate use rights to others in or outside of the collective, with certain restrictions (see Chapter VIII, Use Rights). Anyone can hold use rights, including, but not limited to, foreign entities. In fact, many multi-national companies now own use rights across huge tracts of land, on the order of millions of mu³¹ (Zhu K., 2011). For example, Pepsi leases agricultural lands and, as of 2005, was China's largest private potato grower (for potato chips), while Weyerhaeuser has leased at least 21,000 ha of commercial forests in Fujian Province (Terhune, 2005) (Weyerhaeuser, 2010).

Household use rights are determined in part by individual residence permits ($\dot{P}\Box$, hukou). Hukou is an important consideration for land protection efforts, since projects that change land use or access may require changing the hukou status of local people, without necessarily changing their place of residence. Every Chinese citizen holds such a permit, which specifies his or her status, agricultural or non-agricultural, and which specifies where individuals can live and work. Non-agricultural hukou gives open access to social security systems such as jobs, housing, and educational resources; agricultural hukou gives access to only limited or no social security, but provides rights to agricultural land. Each individual hukou specifies in which locality the bundle of rights defined by the individuals' status can be accessed. So, for example, one can have, in a township administratively defined as rural, agricultural and non-agricultural hukou holders, with different bundles of rights.

³⁰ Land Administration Law Article 9

³¹ 1 Chinese mu is equivalent to 1/15 of a hectare or approximately 1/6 of an acre.

VII. LAND USE PLANNING

Land use planning is an important component of land tenure because it determines which use rights are allowed in which places, which can in turn affect the selection of land protection projects. The Central Government supports a variety of planning and zoning efforts for cultivated land, forests, energy development, transportation, and other land uses. Technically, plans are binding to individual holders of use rights and land users. If someone proposes to use land for a purpose that is incompatible with a land use plan, the agency which originally approved the plan must approve the proposed changes.³² For example, changing land from forestry use to cultivated land use would first require approval of the forestry bureau above the county level, and then of the land and resources. The State Council approves all large-scale energy, transportation, water management, and other infrastructure construction projects. Provincial government approves these same projects if they are less significant in scale (Zhao, 2010).

Despite the intent of plans to be binding in nature, their implementation and enforcement is highly variable, and unplanned development is a common occurrence. Nonetheless, those pursuing land protection projects should be aware that available plans could help or hinder project implementation, depending on the planned land uses that pertain to a project site. This chapter describes the nationwide planning efforts that are most closely related to biodiversity protection including "general land use planning" and conservation planning. It does not describe more detailed planning efforts for the planning and management of specific natural resources such as forests and grasslands, which the law also requires.³³

A. General Land Use Plans

"General land use planning" is the Central Government's term for its planning efforts that focus on three major categories of land use: agricultural land, construction land, and unused land (Part 1, Lay of the Land; Figure 2–13).³⁴ Together, these uses cover the entire country. The Ministry of Land and Resources (MLR) manages general land use planning in accordance with the Land Administration Law (2004). Specifically, the MLR identifies quantitative targets for agricultural, construction, and unused lands to provinces; provinces then issue more specific targets to lower levels of government, and county government is responsible for ensuring the targets are met through planning and zoning or other means.

To date, China has created two General Land Use Plans—one covering 1995-2010 and one covering 2006-2020. The State Council determines the planning period according to need. According to law, local governments should also publish annual land use plans in accordance with

³² General land use planning provides an example. See Land Administration Law Article 26

³³ Grassland Law Chapter III, Forest Law Article 16. Of significance to land protection projects seeking to protect biodiversity, Grassland Law Article 18 specifically identifies "improving the ecological environment, preserving the diversity of living things, and promoting the sustainable use of grasslands" as one of four principles to which management plans must adhere.

³⁴ Land Administration Law Article 4

these longer term plans.³⁵ However, much of rural China is still not zoned. To date, the government has concentrated planning and zoning efforts on the urban environment. The result of this vacuum has been patchwork, unplanned development throughout much of the rural countryside, which has had deleterious environmental effects and uneven economic impacts, particularly in regard to providing comprehensive livelihood improvements for local villagers (Devine, 2010).

Figure 2-13. Categories of land use for general land use planning³⁶

- **Agricultural land**—land "directly used" for agricultural production, including cultivated lands, woodlands, ³⁷ grasslands, land for agricultural water conservation, and aquaculture.
- Construction land—land on which buildings and structures can be built, including land for urban and rural housing, public facilities, industrial and mining use, communications infrastructure, water conservancy facilities, tourism, and military installations.
- "Unused" land—land other than that used for agriculture and construction.

1. Priorities

Through general land use planning, the Central Government emphasizes maintaining farmland while accommodating urban and industrial development, as well as major national land use change campaigns. The 2006-2020 National General Land Use Plan encourages planning according to the four main geographical policy regions: West, Northeast, Central, and Eastern. This division allows the provincial-level governments to account for the different ecological and social conditions in their respective regions. For example, western regions rely primarily on farming and are more prone to drought, erosion, and other climatic threats, whereas industrial and urban development are far more common in the east (Pieke, 2002).

The Five-Year Guidelines are the biggest drivers of the priorities and contents of General Land Use Plans (see Chapter II, Legal Framework). As part of setting economic and development goals, these plans include land use targets, which are concurrent with National General Land Use Plans. For example, the 11th Five-Year Guideline called for the maintenance of 120 million hectares of farmland for year 2010, which was the same target included in the 2006-2020 National General Land Use Plan (Central Government, 2006).

Arguably, retaining and enhancing cultivated lands for grain production was the sole objective of general land use planning between the founding of the People's Republic of China in 1949 and the beginning of the reform era in 1978; it remains a focus today. To quote a foreign analyst, ". . .

³⁵ Land Administration Law Articles 24 and 25

³⁶ Land Administration Law Article 4

³⁷ Based on the Chinese characters, woodlands are not the same as forests in this context.

the 1998 Land [Administration] Law involves a powerful mix of modern land use planning, environmental protectionism, state socialist economic planning and a Maoist preoccupation with basic food production at the expense of everything else [italics added]" (Pieke, 2002). Over the last decade, the Central Government has become increasingly willing to accept foreign grain imports, which has reduced some of the pressure on domestic cultivated lands. However, the most recent version of the Land Administration Law (2004) maintains a clear focus on cropland. As the law strongly states, ". . . the total amount of cultivated land shall not be lower than the controlled targets set in the general plans for land use at the next higher level." Furthermore, provinces, regions, and municipalities directly under the central government must maintain at least 80% of farmland as "basic farmland." Lower governments are responsible for maintaining the total area under cultivation by designating areas for reclamation to replace farmland that gets converted to other uses, mostly industrial and residential (Pieke, 2002).

Despite the emphasis on maintaining cultivated land, the law does acknowledge the need to integrate priorities other than agriculture into General Land Use Plans. For example, the law explicitly forbids destroying forests and grasslands to create farmland,⁴⁰ though this does occur in practice (see Part 1, Lay of the Land). The law also places limits on what wasteland can be designated for reclamation and requires "scientific assessment" of the reclamation proposal (Pieke, 2002). This stipulation, in theory, protects fragile marginal lands from development. However, in practice, land use allocation is directly connected to the local government revenue and therefore the government has a vested interest to attract as much development and encourage as much active land use as possible (Pieke, 2002).

General Land Use Plans must also reflect the priorities and requirements of national economic and social development programs, national land consolidation, environmental protection, carrying capacity, and the requirements of construction projects. Thus, the land use planning system accommodates campaigns and other priorities that are intended to alter land use and development patterns. Grain to Green, the Natural Forest Protection Program, and Open up the West are currently the largest and most far-reaching initiatives. As Part 1, Lay of the Land describes, Grain for Green provides grain and financial subsidies for reforesting meadows, steep slopes, and barren lands and the Natural Forest Protection Program seeks to protect and enlarges China's forests through logging bans and financial compensation for forest management and reforestation. Open Up the West encourages economic development of 12 western and northwestern provinces and the 3 Autonomous Prefectures through preferential policies, government spending, and technology transfer from eastern provinces (Xinhua News, 2005). Other regional and local efforts include anti-desertification campaigns and city greening efforts, among others.

³⁸ Land Administration Law Article 18

³⁹ Land Administration Law Article 34

⁴⁰ Land Administration Law Article 39

⁴¹ Land Administration Law Article 17

2. Targets and Maps

General land use planning at the county level and above can be said to be target-based and not spatial, whereas local plans are spatial. The Ministry of Land and Resources at each level of government is responsible for this work. These efforts originate with quantitative targets that the Central Government (Ministry of Land and Resources) hands down to county government, through provincial and prefectural governments. County-level governments develop spatially explicit plans based on the targets, delineating land use zones for agriculture, construction, and unused land. Local governments can and often do delineate zones for sub-categories under agriculture for cultivated land, orchards and nurseries, grasslands, and forests. Further divisions are also possible.

Consider the General Land Use Plan for Lishui Township in Foshan City in Guangdong Province: The 2006–2020 National Land Use Plan requires that Guangdong Province maintain 2.9 million hectares of arable land for 2010 (Table 2–2). The "Guangdong Land Use Plan" then obligates Foshan City to maintain 56,086 hectares of arable land for 2020 (Table 2–3). Foshan City and Lishui Township then made maps of land uses to accommodate the agricultural targets (Lishui Township).

Table 2–2. Excerpt of national arable land target for provinces, 2006-2020 National General Land Use Plan, highlighting Guandong Province (Ministry of Land and Resources, 2008)

Province	2010 Cultivated land in ha	2020 Cultivated land in ha	Basic farmland protection area in ha
Guandong	2,914,000	2,908.700	2,556,000
Henan	7,914,700	7,898,000	6,783,300
Hubei	4,658,000	4,631,300	3,833,300
Hunan	3,787,300	3,770,000	3,235,300
(others)			
National Total	121,200,000	120,333,300	104,000,000

Table 2–3. Excerpt of "Guandong Province General Land Use Plan" (Ministry of Land and Resources, 2010)

Area within Guandong Province	2010 Cultivated land in ha	2020 Cultivated land in ha	Basic farmland protection area in ha
Foshan	56,086	55,983	48,663
Guangzhou	128,270	128,037	112,345
Shenzhen	4,296	4,288	2,000
Hunan	27,668	27,617	24,408
(others)			
Guandong Total	2,914,000	2,908,700	2,556,000

B. Conservation Plans

Loosely defined, conservation planning is the process of identifying high priority ecological values and important areas for their protection and management. For land protection efforts, it can be useful to know whether potential project sites lie within such areas by providing justification for project establishment. Conservation planning can be, and often is, a component of any type of land use planning and zoning effort. For example, zones for development and industrial uses may also identify areas for conservation activities. Related, China's general land use planning efforts identify forests and other areas that are ecologically important.

For the last decade and not including general land use planning, the Central Government has supported at least four efforts to identify important areas for ecological values across the country: public benefit forests, Ecological Function Conservation Areas (EFCAs), Priority Areas for Biodiversity Conservation, and Major Function Zoning. There is some degree of spatial overlap between these areas, but they vary in terms of purpose, implementation status, and practical protections they offer to ecological values. Public benefit forests are forests in which timber harvest and other activities are either banned or limited; note that all forests are either public benefit or commercial. Compared with the other types of conservation planning efforts, public benefit forests are the most comprehensively established and have the most policy guidance for their management. EFCAs are regions where limited development is encouraged. Limited guidance is available for their management and their effectiveness in conserving ecological functions is to be determined. Priority Areas for Biodiversity Conservation are areas that are important to biodiversity values, and which the Central Government has included in its National Biodiversity Conservation Strategy and Action Plan (2011-2030). Finally, Major Function Zoning identifies, among other zones, a series of banned exploitation zones and limited development areas across the country, including existing protected areas. All of these efforts are steps in a positive direction for additional biodiversity conservation, but all still require additional guidance and action to ensure meaningful and enforceable protection for ecological values.

1. Public Benefit Forests

As Part 1 (Lay of the Land) describes, the Forestry Law (1998) identifies five types of forests: shelter forests, special-purpose forests, timber forests, economic forests, and fuelwood forests. Public benefit forests include the first two, while commercial forests include the latter three.⁴² There are state-, provincial-, prefectural-, and county-level public benefit forests; there are also "key" public benefit forests and "general" public benefit forests. The mapping of public benefit versus commercial forests varies from place to place, but according to Zhang (2010), local people and government agencies know the boundaries for any one forest area.

⁴² Guidance on forest management includes the Forestry Law (1998); Technical Regulation for Non-Commercial Forest Construction GB/T 18337.3-2001 (2001); Regulations on the Delineation of State Non-Commercial Forests (2010); and other regulations or management methods for local provinces, cities, and counties.

County forestry bureaus, with direction from higher levels of government, initiated a forest land use zoning system in the mid-1990s and created the "public benefit" category in the early 2000s (Xu et al., 2010). The government issued guidance defining "public benefit forest" entitled Delineation of Non-Commercial Forests in 2001, and then updated it in subsequent years. The purpose was to increase protection for natural forests, as opposed to plantation forest, through the NFPP and in response to the flooding of the Yangtze River. Since then, the State Forest Administration at various levels has made and continues to make adjustments to public benefit/commercial designations. Currently, 43% of the forests are public benefit while 57% are commercial (State Forestry Administration, 2010). The government may decrease the amount of public benefit forest; according to the Delineation of State Non-Commercial Forests (2010), the government is planning to classify 30-40% of forestry lands as public benefit forests. This shift may stem in part from the pressure that the government has been receiving from local people seeking to generate more income from forest lands (Zhang, 2010).

Activities in public benefit forests are more restricted than those in commercial forests, but "public benefit" does not necessarily mean that use is banned altogether. For example, Jiangsu Province's regulations for public benefit forests allow tourism, recreation, and other non-timber consuming activities if the local government issues permits for those activities. Jiangsu's regulations also explicitly prohibit activities such as cutting fuelwood; collecting pine sap; hunting; making fires; mining sand, soil and stones; discharging pollutants and disposing solid waste; and harvesting trees from scenic areas, nature reserves, and slopes greater than 25 degrees.

Truly protecting public benefit forests is a challenge. Holders of use rights are eligible for compensation through a "forest ecological benefit compensation fund" but it provides negligible income to local people. The fund supports tree planting and tending, protection, and management of public benefit forests.⁴³ For state-owned forests, on average the government pays 1.75 RMB/mu/year, the price of a small bottle of water, to those holding use rights in public benefit forests (china.com.cn, 2011). ⁴⁴ For national and provincial public benefit forests, the Central and provincial governments jointly pay 5 RMB/mu/year (Chen, 2010). By comparison, a single piece of bamboo could be sold for 10 RMB while economic development would generate 1000-1200/mu. Needless to say, the compensation does little to discourage timber harvesting and other potentially damaging and illegal uses of public benefit forests (Zhang 2010). Note that the compensation varies from place to place and can change over time.

For example, in Guandong Province, the initial compensation standard was 2.5 RMB/mu/year, increased to 8 RMB in 2007, and may increase to 12 RMB/mu/year. In Guangzhou City, the capital of Guandong Province, compensation was much higher, averaging 25 RMB/mu/year in 2008, 39 RMB/mu/year in 2009, and 41 RMB/mu/year in 2010 (Guangdong Forestry Bureau, 2010).

⁴³ Forestry Law Article 8; Management Approach on Central Government Forest Ecological Benefit Compensation Fund (2004, 2007).

⁴⁴ Of the 1.75 RMB, the Central Government pays 1.41 RMB. For the next phase of the program, which as of October 2011 had been proposed but had not yet been approved, the Central Government would pay 5 RMB/*mu*/year.

2. Ecological Function Conservation Areas

In 2000, the State Council directed the Ministry of Environmental Protection (MEP) to create Ecological Function Conservation Areas (EFCAs) in order to protect water and soil, control floods, maintain biodiversity, and provide other ecological functions. EFCAs are regions that encourage limited development, and may in fact be the same or similar to as the limited development areas that are part of Major Function Zoning. They differ from traditional protected areas such as nature reserves and scenic areas in that they allow more development, are potentially less permanent, tend to be larger, and cross more jurisdictional boundaries. In fact, they often overlie and expand well beyond existing protected areas, and include settlements and a wide range of land uses (Xu & Melick, 2007). EFCAs range greatly in size; for example the Headwaters of Dong River EFCA is approximately 3,500 hectares while the Poyong Lake EFCA is more than 162,000 hectares.

The MEP works with relevant central and local government agencies to delineate EFCAs. Typically, provincial environmental protection bureaus submit applications to the State Council for establishing EFCAs. From 2001-2009, MEP established 18 national-level pilot EFCAs while provinces such as Hebei, Shanxi, Shandong, and Jiangsu began to pilot local-level EFCAs. MEP aims to establish 50 EFCAs by 2020 (Figure 2–14).

Guidance for EFCAs includes "Guidance for Nomination and Approval of Ecological Function Conservation Areas" (2002) and "Guidelines for National-Level Key Ecological Function Conservation Area Planning" (2007). The guidance outlines the planning process for EFCAs, including the identification of 5-year, 10-year, and 15-year social, economic, and environmental goals. It also encourages the creation of nature reserves and planning and zoning to protect ecological values. It does not, however, include any "teeth" for ensuring the effective protection and enforcement of conservation actions.

3. Priority Areas for Biodiversity Conservation

The National Biodiversity Conservation Strategy and Action Plan (2011-2030) identifies 35 Priority Areas for Biodiversity Conservation. The Ministry of Environmental Protection identified these areas by incorporating technical support from The Nature Conservancy, through the Conservation Blueprint project (Figure 2–15) (The Nature Conservancy, 2007) (The Nature Conservancy, 2011). These areas reflect both species and ecosystem diversity and are intended to conserve a China's array of biodiversity values, from deserts to alpine areas, and from rare plants to Siberian tigers.

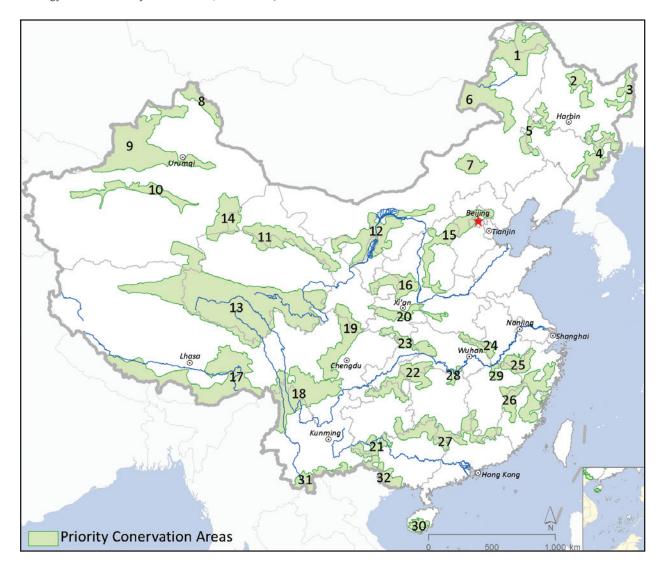
To protect these values, the *National Biodiversity Conservation Strategy and Action* identifies a host of actions, such as developing incentives for biodiversity conservation (funding, policy, etc.), improving laws and regulations, creating land use planning demonstration projects, establishing a national biodiversity information management system, strengthening the management of nature reserves, and establishing "ecological demonstration projects for alternative livelihoods" (Ministry of Environmental Protection, 2011). Provinces are developing their own, more detailed plans. For example, Sichuan has already done so, and aims to create five new protected areas and has committed 930 million RMB toward their management (Watts, 2010). See Part 3, Land Protection in Practice.

Urumqi **Ecological Function Conservation Areas**

Figure 2–14. Ecological function conservation areas (through 2020)

Figure 2-15. Priority Areas for Biodiversity Conservation (The Nature Conservancy, 2007)

MEP and TNC worked together to identify these areas through the Conservation Blueprint project (The Nature Conservancy, 2007). They became the basis for those identified in the *National Conservation Strategy and Biodiversity Action Plan (2011-2030)*.



- 1. Daxinanling Area
- 2. Hulun Buir Grassland
- 3. Three Rivers Plain Wetland
- 4. Xiaoxinanling Area
- 5. Altai Mountainous Area
- 6. Tianshan-Southwest Edge of Junggar Basin
- 7. Songnei Plain Wetland
- 8. Changbai Mountainous Area
- 9. Tarim River Basin Deserts
- 10. Altun Mountainous Area
- West Ordos-Helan-Kageyama Mountainous Area
- 12. Qilian Mountainous Area

- 13. Liupan-Ziwuling-SouthTaihang Mountainous Area
- Qiangtang-Three River Source Area
- 15. Minshan-North Hengduan Mountainous Area
- 16. Qinling Area
- 17. Dabashan Area
- 18. Dabieshan Area
- 19. Southeast Himalayas Area
- 20. Zhejiang-Jiangxi- Anhui Mountainous Area
- 21. Hunan-Hubei-Chongqing-Guizhou Mountainous Area

- 22. Zhejiang-Fujian-Jiangxi Mountainous Area
- 23. Poyang Lake Area
- 24. Dongting Lake Area
- 25. South Hengduan Mountainous Area
- 26. Naling Area
- 27. Western Guangxi-South Guizhou Limestone Area
- 28. West Guangxi Limestone Area
- 29. Xishuangbanna Area
- 30. South Central Hainan
- 31. Xilinguole
- 32. Liupan-Ziwuling-SouthTaihang Mountainous Area

4. Major Function Zoning: Banned Exploitation Zones and Limited Development Areas

In 2006, the State Council initiated "major function zoning" for mainland China to facilitate sustainable development throughout the country. The State Council issued the final plan in December 2010 and proposes its completion by 2020 (State Council, 2010). To develop the plan, a working group comprised of different agencies delineated four types of zones across the country: banned exploitation, limited development, prioritized development, and optimized development. From a land protection perspective, the zones of greatest interest include the banned exploitation and limited development zones. The former covers more than 1,300 existing protected areas including, but not limited to, world cultural and natural heritage sites, national-level protected areas, and provincial-level protected areas. The limited development areas, which may be the same as Ecological Conservation Function Areas (see above), include major agricultural producing areas and ecologically important areas such as headwaters. Factors influencing the zone designations include environmental carrying capacity, existing development density and development potential, anticipated population distribution, and land use. Implementation of the zoning, including allowable and prohibited uses, is to be determined.

VIII. USE RIGHTS

A. Duration and Renewal

Contracts for use rights vary by land use/land cover type, with terms from 30 years to upwards of 70 years (Figure 2-16, Table 2-4). According to law, contractors "may continue" to operate under expiring contracts. 45 The Grassland Law explains that upon contract expiration, the original contractor has the priority for contract renewal "under equal conditions." 46 With the exception of this provision, however, the laws do not provide guidance for renewals such as process, fees, or the number of extensions that are possible. The latter condition suggests that one may be able to hold use rights in perpetuity, thereby enabling the privatization of use rights. Contract renewals under the law currently in effect have not yet been tested; however, it is less a question of whether contracts will be renewed, and more a question of how (Zhu K., 2011). As previously discussed, in 1998 the Land Administration Law required collectives to contract to farmers 30-year use rights of lands "for use in crop farming, forestry, animal husbandry, and fisheries production."47 Therefore, the original 30-year contracts may start to expire sometime around 2023, and the renewal process will be implemented at that time.

Figure 2-16. The duration of use rights varies by land use/land cover type, such as 30-70 years for forests. Photo by Li Baoming



⁴⁵ Property Law Article 126

⁴⁶ Grassland Law Article 14

⁴⁷ Land Administration Law (1998 and 2004), Article 14

Table 2-4. Contract duration for rural land

This table includes all land use/land cover types for which the law provides specific contract durations.

Land use/land cover type	Contract duration	
Agricultural lands		
Arable land	30 years ⁴⁸	
Grassland	30-50 years ⁴⁹	
Forestland	30-70 years ⁵⁰ Contracts can be longer than 70 years with SFA approval ⁵¹	
Construction lands		
Residential use of collective land	No duration specified. Households registered with a collective lose the right to use their residential land once they cancel their registration with the community.	
Residential use of state land	Up to 70 years ⁵²	
Industrial use of state land	Up to 50 years	
Educational, scientific, cultural, sanitary, and sports land	50 years	
Business, tourism, and recreational land	40 years	
General and other land	50 years	
Unused lands		
"Waste hills, land or beachland whose use rights have not been ascertained for crop cultivation, forestry, animal husbandry or fisheries." 53	Contracts may be given for "long-term use."54 The law does not specify an actual duration.	
Desertified land for purposes of rehabilitation	Up to 70 years.55	

⁴⁸ Land Administration Law Article 14, Rural Land Contract Law Article 20, Property Law Article 126

⁴⁹ Rural Land Contract Law Article 20, Property Law Article 126

⁵⁰ The Land Administration Law states that the term for forestry land is 30 years. Rural Land Contract Law Article 20 and the Property Law Article 126 state that the term is 30-70 years.

⁵¹ Rural Land Contract Law Article 20, Property Law Article 126

⁵² Interim Regulations of the People's Republic of China Concerning the Assignment and Transfer of the Right to the Use of the State-Owned Land in the Urban Areas (1990). This same source is used for the duration of all types of uses of construction lands, not including residential use of collective lands.

⁵³ Land Administration Law Article 40

⁵⁴ Land Administration Law Article 40

⁵⁵ Law on Prevention and Control of Desertification Article 34

B. Contractual Rights and Obligations

Together, the Land Administration Law, the Property Law, and the Rural Land Contract Law describe rights and obligations associated with use right certificates and contracts. These provisions pertain to all land uses including but not limited to cultivated lands, forests, and grasslands.⁵⁶ The obligations and land use rights with the greatest relevance to land protection efforts include the following:

- **Right to make decisions**—An owner of use rights has the right to independently make decisions about "production and operation" of the land⁵⁷ in conformance with the contract.
- **Right to make a profit**—An owner of use rights can "possess, utilize, and obtain profits" from the land and its natural resources in accordance with the provisions of the contract.⁵⁸
- **Right to mortgage "barren land"**—An owner of use rights can mortgage "barren land" that is contracted through "bidding, auction, and discussion." ⁵⁹ In general, however, it is not permissible to mortgage collective land. ⁶⁰
- Right to circulate the rights to other parties— An owner of use rights can transfer them to another party or parties through means such as subcontracting, leasing, exchange, transfer, inheritance, and pooling of rights as shares. ⁶¹ Certain restrictions apply. For example, outright purchase or sale of use rights is not possible—the original "owner" of the use rights continues to own them even upon circulation. Furthermore, the term of circulation must be within the original contract term. ⁶² In other words, if someone has already used 20 years of forest use rights under a 70-year contract, the contract for the circulation must be less than or equal to 50 years. As another example, if a collective wants to circulate use rights to an entity outside of the collective, the transfer requires consent from more than a "two-thirds majority vote" of the villagers' congress or villagers'

⁵⁶ The Rural Land Contract Law applies to "arable land, forestlands and grasslands owned collectively by the peasants and by the State and used collectively by the peasants according to law, as well as other lands used for agriculture according to law." The other two laws have broader application to other lands, such as construction lands.

⁵⁷ Rural Land Contract Law Article 16

⁵⁸ Property Law Articles 117, 118, and 125

⁵⁹ Property Law Article 180

⁶⁰ The Property Law Article 184 states, "The following property may not be mortgaged: Land use right to the land owned by the collectives such as cultivated land, house sites, private plots, and private hills, with the exception of those provided by law."

⁶¹ Rural Land Contract Law Articles 31, 32 and 49

⁶² Rural Land Contract Law Article 33, Grassland Law Article 15, Property Law Article 161

representatives, and the township must ultimately approve the contract. An individual holding use rights can also circulate them to third parties, and consent from the collective may or may not be required depending on the nature of the transaction. Also, the law does not explicitly state whether a third party contractor can pass the rights to fourth parties, and fourth parties to fifth parties, and so on. In the absence of such guidance, such transfers are theoretically allowable within the terms of the contract.

- Obligation to conform to available land use plans—The owner of use rights must adhere to available county and township land use plans. ⁶⁵ The government would need to approve any proposed changes to the land use plan. See Chapter VII, Land Use Planning.
- **Obligation to honor the contract**—While this may seem like common sense, this obligation is very important to tenure security and, therefore, the success of land protection projects. The law explicitly requires contracting parties to honor contracts⁶⁶ and describes dispute resolution procedures. For example, the party issuing the contract cannot rescind the use rights within the contract term.⁶⁷ Furthermore, the party issuing the contract may stop a contractor from damaging the contracted land.⁶⁸

Although the contracting parties must adhere to the contract, Chinese law authorizes the government to expropriate land and rescind contracts, if it is in the public interest. The law entitles the owner of use rights to compensation for any land that is "requisitioned or occupied according to law." This is standard to most countries; for example, the U.S. has laws regarding "eminent domain." What is critical is the transparency of the process by which the government utilizes this authority and the level of compensation that it provides. The problem in China is that the compensation is grossly inadequate and the definition of "public interest" too broad (Zhu K., 2011). See Chapter IX, Tenure Security and Enforcement.

⁶³ Land Administration Law Article 15, Rural Land Contract Law Article 48, Grassland Law Article 13

⁶⁴ Rural Land Contract Law Article 39

⁶⁵ Rural Land Contract Law Article 15

⁶⁶ Grassland Law Article 12, Forest Law Article 7, Land Administration Law Article 13

⁶⁷ Rural Land Contract Law Articles 14 and 24, Property Law Article 131

⁶⁸ Rural Land Contract Law Article 13

⁶⁹ Rural Land Contract Law Article 16, Land Administration Law Article 2

C. Allowable and Prohibited Uses

1. Cultivated Lands

The Land Administration Law (2004) provides the primary guidance for the use of cultivated lands. Of relevance to land protection efforts, the law requires that cultivated lands be maintained in terms of quality and quantity, and that cultivated lands that are approved for conversion to other uses be farmed until construction occurs. These are important provisions for projects that may consider the use of cultivated land for other purposes, such as reforestation or tourism development.

Protection—Chinese law places great emphasis on maintaining farmland as farmland, stating that the State "strictly controls the conversion of cultivated land into non-cultivated land."⁷⁰ Provincial-level governments are responsible for ensuring that the total amount of cultivated land is equal to or greater than the targets established in General Land Use Plans (see Chapter VII, Land Use Planning).⁷¹ In particular, the Regulations on the Protection of Basic Farmland (1994) emphasize the protection of "basic farmland protection areas" which provincial-level governments must designate for at least 80% of all cultivated lands, a regulation which was later incorporated into the Land Administration Law.⁷² Holders of use rights may convert cultivated land only with the approval of the government. One-to-one replacement of cultivated land is required: If the government allows for the conversion of cultivated land, the "units occupying the cultivated land" must provide for the same amount and quality of land elsewhere. If such land is not available, the unit must pay a land reclamation fee set by provincial-level governments.⁷³

Active use—Not only must cultivated land be maintained, but it must actually be used for its specified purpose. "No unit or individual is allowed to let the [cultivated land] idle or go wasted," states the Land Administration Law.⁷⁴ On cultivated lands that the government approves for non-agricultural construction, the land must be cultivated until construction occurs. If construction fails to begin for more than a year, the government charges land idling fines. And if construction fails to begin for two successive years, local government must revoke the use rights and return the land to the managers of the collectively-owned lands for re-cultivation.⁷⁵

Other activities—The law prohibits certain activities on cultivated lands such as building houses, removing soil, mining, digging sand, collecting stones, or digging graves.⁷⁶ It requires the maintenance of irrigation and drainage infrastructure, thereby implying that constructing such

⁷⁰ Land Administration Law Article 31

⁷¹ Land Administration Law Articles 18 and 31

⁷² Regulations on the Protection of Basic Farmland Article 9, Land Administration Law Article 34

⁷³ Land Administration Law Article 31

⁷⁴ Land Administration Law Article 37

⁷⁵ Land Administration Law Article 37

⁷⁶ Land Administration Law Article 36

facilities is allowed. The law also requires soil improvements "to raise fertility and prevent desertification, salinization, water loss, and soil erosion and pollution."⁷⁷ This requirement helps explain China's heavy use of fertilizers.

2. Forests

The Forestry Law (1998), forest planning guides, and other forest-related policies dictate allowable and prohibited uses in forests. The law is fairly ambiguous about allowable and prohibited uses, with the exceptions of strongly encouraging afforestation and restricting timber harvests

Timber harvest—The State requires timber quotas which set a "ceiling" on maximum harvests and requires that the annual rate of timber growth exceeds consumption.⁷⁸ To control timber harvest, permits are required for anyone except rural residents intending to harvest "scattered trees owned individually and growing on plots of land for their personal needs."⁷⁹ The law provides limited direction about where and how timber harvest may occur. For example, the law implies that clear-cutting is undesirable but does not prohibit it.⁸⁰ The law does "strictly prohibit" timber harvest in certain types of special purpose forests, namely those in nature reserves, at ancient and historic sites, and in revolutionary memorial places.⁸¹

Afforestation—The Forestry Law explicitly encourages afforestation, going so far as to identify it as "an obligation that citizens should fulfill." In fact, the law recommends that the government set afforestation goals in light of local conditions and organize tree-planting projects for citizens.⁸²

Other activities—The Forestry Law is ambiguous about other activities in forests. For example, it does not expressly state that livestock grazing and fuelwood harvest are allowed, but implies such by specifying that these activities are prohibited only in "young forest lands." It prohibits the occupation of forest for mining and construction, yet identifies the necessity to obtain approval for "the occupation or requisition of forest land" for construction purposes. Similarly vague, it prohibits the export of rare and precious trees and their products and derivatives and the hunting and catching of wild animals under state protection, but adds instructions for export and hunting, such as the need to file permits. Other activities are not addressed at all, such as tourism, recreation, energy development, and management activities such as thinning.

⁷⁷ Land Administration Law Article 35

⁷⁸ Forestry Law Article 29

⁷⁹ Forestry Law Article 32

⁸⁰ Forestry Law Article 31 states, "Total felling [in mature timber forests] shall be strictly controlled and renewed afforestation shall be completed within the same year of felling or the following year."

⁸¹ Forestry Law Article 31

⁸² Forestry Law Articles 11 and 26

⁸³ Forestry Law Article 18

3. Grasslands

The Grassland Law (2003) guides the use of the grasslands. While the law provides some direction as to allowable and prohibited uses such as livestock grazing, a close read demonstrates that just about any activity is allowed. The law does emphasize the need to re-vegetate and protect grassland resources.

Livestock grazing—The Grasslands Law includes a variety of provisions that are designed to protect the environment while allowing for livestock grazing. The law prohibits exceeding livestock carrying capacity, as formulated by "the competent administrative department for grasslands under the State Council." It is prohibited to graze in grasslands "that suffer serious degeneration, sand or rock encroachment, or salinization [or] in ecologically fragile areas." The law also requires livestock grazing practices such as "regional rotation grazing, rational distribution of herds and balanced use of grasslands," though these terms are not defined. Other protective practices are encouraged but not required, such as rearing livestock in pens and utilizing manmade grasslands, as opposed to natural grasslands, for at least some grazing.⁸⁴

Re-vegetation and new grassland creation—The Grasslands Law explicitly encourages the development of "man-made grasslands, improvement of natural pastures and development of bases for forage grass and fodder" to increase grassland carrying capacity (Figure 2–17).⁸⁵ The State supports restoration of cultivated lands to grasslands.⁸⁶ To assist with efforts, the law requires local government to "mark the areas for special control and improvement" and encourages local government to create seed banks.⁸⁷

Protection—The law explains that certain types of grasslands are "essential grasslands" and must "be placed under strict control." Essential grasslands include, for example, those that provide ecosystem services such as water conservation and wind shelters, habitat for state-protected wild animals and plants, and bases for grassland research and experiments. While the phrase "strict control" implies outright protection, the State Council has the discretion to determine the measures for protection and control.⁸⁸ Protection of rare and endangered plant species "is required, and the local government may establish grassland nature reserves.⁸⁹

Other activities—Whether grasslands are "essential" or not, in general, the law requires adherence to the "relevant plans for grassland protection, development, and use." Certain activities are prohibited, including conversion of grasslands to cultivated land, 90 digging plants, or engaging in other activities that would harm sensitive grasslands, such as desert or semi-desert

⁸⁴ Grassland Law Articles 33-35, 45, 47

⁸⁵ Grassland Law Article 27

⁸⁶ Grassland Law Article 48

⁸⁷ Grassland Law Articles 29, 31, 32

⁸⁸ Grassland Law Article 42

⁸⁹ Grassland Law Article 43, 44

⁹⁰ Grassland Law Article 46

grasslands.⁹¹ The Grasslands Law discourages but does not prohibit mineral exploration, statingthat "no grasslands, or as little grasslands as possible, may be occupied for exploiting mineral resources."⁹² Other activities are allowed, with local government approval, such as construction (with compensation to holders of use rights and payment of restoration fees to the local government);⁹³ mining sand, soil and stone;⁹⁴ and profit-making tourist activities.⁹⁵

Figure 2–17. The Grasslands Law encourages grassland restoration, such as this project in Hulunbeir, Inner Mongolia. Photo by Li Xinhai



4. Unused Lands

The Land Administration Law provides limited guidance as to unused lands (huang di), such as deserts and high alpine areas. Basically, it encourages unused lands to be used. For example, as the law states, "[Cultivated] Land shall be used sparingly for non-agricultural construction purposes. Whereas wasteland can be used, no cultivated land shall be occupied; whereas poor land can be used, no good land shall be occupied."⁹⁶ The term "unused land/wasteland" often underestimates its true value. As a result, local (or higher) authorities may sell it or require other uses, when in fact the land might be valuable for grazing, medicinal harvesting, biodiversity conservation, or other productive purposes (Menzies, 2011).

⁹¹ Grassland Law Article 49

⁹² Grassland Law Article 38

⁹³ Grassland Law Article 39

⁹⁴ Grassland Law Article 50

⁹⁵ Grassland Law Article 52

⁹⁶ Land Administration Law Article 36

D. Non-Use Rights

Chinese law is unclear as to whether it is permissible to acquire use rights but not use them (i.e., "non-use rights"). An exception is the core areas of nature reserves, in which human activities are prohibited by the Nature Reserve Regulations. The ambiguity around non-use rights is an important consideration for land protection efforts in areas that are zoned for specific uses, since NGOs or other entities may want to protect land by acquiring the rights and limiting or refraining from use activities that could impact biodiversity values. In possible support of a non-use right the Land Administration Law states, "Units or individuals using land shall be responsible for the *protection*, management, and a rational use of the land" [italics added]. The law is clear, however, that cultivated land at least must be productive, stating, "No unit or individual is allowed to let the land idle or go wasted." The legal ambiguity around non-use rights for lands other than cultivate lands may leave decisions to the discretion of the government and other stakeholders.

E. Perceptions of Use Rights

While Chinese law identifies use rights and obligations—some more clearly than others—in practice, allowed use rights and perceptions thereof vary greatly, even within villages. Such divergent understandings may pose challenges to those seeking to acquire use rights for conservation or other purposes. Consider transfer rights as an example. A survey of eight provinces showed great variance in perceptions of the right to transfer use rights within or outside of villages, even though the law explicitly allows for this right. Some participants felt that individuals had autonomous authority to make transfer decisions; others thought that transfers were allowed with village approval, and still others did not think that transfers were allowed at all (Xu et al., 2009). Differences of opinion about who has the right to make decisions about which use rights will affect whether and how quickly land protection projects can be implemented.

F. Documentation of Use Rights

1. Types of Documents

Thorough documentation of ownership and use rights, combined with a land registration system, can reduce variable perceptions of use rights and associated challenges. Land transactions, including those related to land protection efforts, may occur more smoothly for parcels with established written contracts than for parcels that lack documentation. As the Registration in Practice section below describes, the Chinese government is working toward consistent documentation of ownership and use rights across the country. In the meantime, a variety of laws do describe requirements for documenting ownership and use rights, variably implemented though they may be: The Land Administration Law, Property Law, Rural Land

⁹⁷ Land Administration Law Article 9

⁹⁸ Land Administration Law. Article 37

Contract Law, Forestry Law, and Grassland Law. Together, these laws identify two main types of documents to convey ownership of rural land and use rights: ownership certificates and use right certificates/contracts. The latter takes a variety of forms (Table 2–5).

The government issues **ownership certificates** to managers of collective lands only, since state and collective ownership are the only types of land ownership in China. County land and resources bureaus issue these certificates for arable land (including grasslands) and residential land, while county forestry bureaus issue the certificates for forests.

Use right certificates/contracts take various forms and are issued by different parties. In general, the government issues "certificates" while managers of collective lands issue "contracts." Thus, anyone receiving use rights directly from the State should receive a use right certificate from the local government. Anyone receiving use rights for collective lands should receive at least two documents—a certificate from the local government and a contract from the collective land managers. The contract should be signed by a representative of the collective lands and a representative of the household. The certificate should contain "substantially the same content as the contract but [be] issued and sealed by the county level or higher and not bearing local signatures" (Prosterman et al., 2009).

Contracts may take several forms according to law: a **household contract** for agricultural land such as arable land, forestland, and grassland and a **contract in other forms** for unused lands such as barren mountains and beaches. The Rural Land Contract Law also requires written contracts for the circulation of use rights to a third party. This contract may take the form of an **easement**, which is a type of use rights certificate/contract that the Property Law identifies. Correct example, a household transferring forest use rights to a timber company would need to establish a contract (e.g., easement) with that company. The law implies that easements may cover all or part of a parcel, and some or all of the use rights. Therefore, it would be possible for multiple parties to hold different use rights to the same plot of land. The law is unclear as to whether the conveyance of use rights to third parties must be reported to the local government and whether the third party must actually obtain a use rights certificate/contract from the local government. As the Rural Land Contract Law states, "Where the parties to the circulation . . . request registration, they shall apply for registration to the local people's government at or above the county level" [italics added]. The law does not address subsequent transfers of use rights such as from third parties to fourth parties.

⁹⁹ Rural Land Contract Law Section 5

¹⁰⁰ Property Law Chapter XIV Easement

¹⁰¹ Property Law Article 157

¹⁰² Rural Land Contract Law Article 38. Property Law Article 158 contains a similar clause: "Where the parties concerned require registration, the application for easement registration may be filed with the registration departments."

Table 2–5. Types of official documents for ownership and use rights

Туре	Purpose	Issuer	Recipient
Ownership certificates	To confirm collective land holdings	County government: land and resources bureau for arable and residential land; county forestry bureau for forests	Managers of collectively-owned lands
Use rights certificates	To confirm ownership of use rights (not the land itself)	County government or higher; agency varies based on land use	Individual households for collective lands "Units or individuals" for state lands
Use right contracts	To confirm ownership of use rights (not the land itself)	Collective land managers or other	Primarily to households, but also to third parties
Household contracts	To confirm ownership of use rights for collective lands including "arable land, forestlands and grasslands as well as other lands used for agriculture"		
Contracts in other forms	To confirm ownership of use rights for lands "not suited to household contract" such as "barrens mountains, gullies, hills, and beaches"		
Easements	To convey a subset of someone's use rights to another party for all or part of a parcel		

2. Registration in Practice

Although the law requires documentation of ownership and use rights, in practice such documentation varies widely and the validity of documents is not always guaranteed (Table 2-6). The government "pursues a uniform registration system" and requires registration for real property including but not limited to land. 103 The law also requires survey and mapping of "the estate boundary location lines of lands, buildings, structures and other aboveground objects attached to the land."104 Despite these goals and provisions, at present there is no robust,

¹⁰³ Property Law Article 10

¹⁰⁴ Survey and Mapping Law Article 19

consistently-implemented land registration and cadastral system for land in rural China.¹⁰⁵ (Ho, 2001). The registration regime of urban lands is better defined than that for rural lands due to the passage of the Urban Real Estate Law in 1995.

Contents of certificates or contracts vary widely, and in reality many transactions occur without documentation. Many people may not know what documents are required or valid (Menzies, 2011). Somewhere between 40-55% of rural Chinese households lack certificates and/or contracts validating their land rights (China Law & Practice, 2009) (Deininger et al., 2004) (Prosterman & Zhu, 2009) (Rural Development Institute, 2010). It is more common for households to hold either a certificate or a contract, rather than both, despite the requirement by law and policy. For example, a survey of nearly 1,600 households in 17 major agricultural provinces found that for arable lands, 63% have received a certificate and 53% have received a contract, but only 44% have received both (Prosterman et al., 2011). Documentation of ownership and use rights varies by land use (Table 2–6).

Table 2–6. Documentation of ownership and use rights, by land use, and including agencies responsible for issuing the documentation (Landesa, 2009)

Land use	Rights	Responsible agencies	Percent with documentation
Arable land and	Collective ownership	Ministry of Land and Resources	54%
grasslands	Household use	Ministry of Agriculture	71%106
Residential land	Collective ownership	Ministry of Land and Resources	54%
	Household use	Ministry of Land and Resources	79%
Forest land	Collective ownership	State Forestry Administration	90%
	Household use	State Forestry Administration	< 50%

Where certificates or contracts exist, many are incomplete or inaccurate. For example, a 2003 survey of 1,100 villages in China's 12 provinces showed that only 40-45% of contracts included contract terms or some sense of the physical boundaries of the land. Of these documents, 75% included a seal from the province or county, which is important because it lends a higher level of security than if only signed by the village leader or another local official (Deininger et al., 2004).

Land registration is the process of creating an official record of land ownership, use rights, and chain of circulation through titles, deeds, or contracts. Related, a cadastre is a methodically-arranged public inventory of land registration records. Worldwide, typical components of land registration records include descriptions of parcels such as location, size, and value; ownership and property rights such as use rights, control rights, and transfer rights; and parties involved the transaction including names, date of births, living addresses, professions, and other identifying information. Cadastres usually include maps with parcel identifiers that provide links to land registration records. Government agencies typically maintain land registration records and cadastres (Henssen, 1995)

¹⁰⁶ The RDI/Landesa draft states 59%, but one of the authors of the document reported that the percentage is now 71% based on a nationwide survey completed in 2009 (Zhu K., 2011).

Even when certificates and contracts are complete and accurate, their validity is not always guaranteed. With changing policies, people (including officials) do not necessarily know how to address conflicting claims for use rights. For example, a contract from 1992 may have granted a farmer rights to village forest land, while a 1999 policy might have given the collective the right to auction the entire forest, which was then leased to a company in 2005. Who is the valid holder of the use rights in this example? (Menzies, 2011).

Registration efforts are also hindered by ambiguity in the laws. For example, the law requires that the government at the county level or above record and issue ownership and use right certificates¹⁰⁷ in the "Real Property Register." However, the law does not define the Real Property Register nor does it specify the agencies responsible for registration. As a result, both the Ministry of Agriculture and the Ministry of Land and Resources have become involved in registering arable land and grasslands, which has led to inconsistencies and inaccuracies from place to place. Furthermore, the law provides limited guidance as to the process for registering land rights and how transfers of use rights to third parties should be recorded.

To resolve these and other registration issues, the Central Government is taking steps toward common land registration and cadastral systems for rural lands. Examples include the following:

- The Ministry of Land and Resources is sponsoring an effort to map collective and state lands across the country. This effort will not map use right boundaries for households, but individual local governments may do this on their own accord (Li, 2010).
- A pilot project in Anhui Province seeks to create and maintain a functional land registration system for farmers' land use and contracting rights. Participants have drafted a manual for a rural land registration system, including parcel mapping, and have identified next steps toward larger-scale registration. The Ministry of Agriculture also conducted approximately six pilot programs in the last two years and plans to do more (Landesa, 2009).
- The government is encouraging stronger registration practices through the current collective forest reform. An official government document announces a goal of achieving "clear property rights and tenure" by 2013. "Contract[s] or transfer[s] of contract[s] . . . have to be perfect," describes the document, and must be corrected if they do not meet legal requirements. Furthermore, the document encourages consistent registration procedures and contract contents, as well as clearly defined duties such as "afforestation, protection and management, forest fire prevention, pest control, and responsibility to promote sustainable management of forest resources" (CPC Central Committee and State Council, 2008).

Part 2: Land Tenure 112

¹⁰⁷ Land Administration Law Article 11, Rural Land Contract Law Article 23, Property Rights Law Article 127, Forestry Law Article 3, and Grassland Law Article 11

¹⁰⁸ Property Law Article 16

Despite these efforts, a full registration system will not likely be implemented anytime soon. According to one estimate it could take 30-50 years for the Chinese government to create a land registration system covering the 1.5 billion parcels of rural land in China (Landesa, 2009). In the meantime, the wide variance in registration efforts will continue to cause tenure security issues, land disputes, and relatively slow and inefficient land transactions—all of which affect land protection efforts.

IX. TENURE SECURITY & ENFORCEMENT

Tenure security has been and continues to be a major challenge in China, and is a major consideration for land protection efforts. Certainly it has improved over the last several decades as the Central Government has extended the duration of use rights, started requiring written contracts, and ramped up enforcement mechanisms, through the issuance of the Law on Mediation and Arbitration of Rural Land Contract Disputes in 2010. However, security and enforcement varies widely across the country. There are differences from one province to another, from one county to another, from one township to another, and even from one village to another village within the same township (Rozelle & Li, 1998) (Prosterman et al., 2009). Widespread challenges include inadequate documentation of land rights (discussed in Chapter VIII, Use Rights), land reallocations and takings, and variable enforcement (discussed below). These issues leave holders of use rights susceptible to changes on their lands, even when they hold well-written contracts. Land protection projects must proactively address these vulnerabilities to ensure long-term success.

A. Land Reallocations and Takings

Both land reallocations and takings have created tenure insecurity in China. The former refers to (administratively-led) reallocations of land among households, whereas the latter refers to land conversions by local leaders. Both are influenced by challenges with documentation: When people do not know what documents are required or valid, it is easy to effectuate reallocations and land takings (Menzies, 2011). Reallocations of land were the main cause of conflicts during the 1990s, while land takings have been taking the lead since the beginning of the 2000s (Vendryes, 2010).

Land use rights may be allocated to households for a set number of years, but "most villages in China have adopted the practice of periodically readjusting or reallocating landholdings," according to Zhu & Prosterman (2007). Readjustments may range from a village augmenting or diminishing a household's landholding based on changes in family size, to a village reclaiming and redistributing all the land in a village. The practice of readjustment is illegal under the law, except in cases of "natural calamities." However, according to a survey of 17 provinces, 30% of villages still carry out the practice (Zhu & Prosterman, 2007).

Land takings—also known as "tear down and relocate"(拆迁, chaiqian) or "government coercive land expropriation" (政府强行征地, zhengful qiangxing zhengdi)—may have an even greater impact on rural households than reallocations (Habitat International Coalition) (Guo, 2001). Skyrocketing real estate prices have spurred industrial growth and urban expansion, and it is not uncommon for local government and village officials to purchase or outright take land from

¹⁰⁹ Rural Land Contract Law Article 27

peasants, regardless of use rights, and sell it at a much higher price to developers. As Hessler (2010) writes, "Profits are individual, but the risk is communal; local cadres benefit from land sales while villagers are stuck with the ramifications." The number of reported mass protests has escalated from a few thousand in the mid-1990s to 80,000 in 2006, most of which focused on land takings (Xu et al., 2010) (Lee, 2009). Some of the takings have resulted in violence, with peasants being injured or killed (Schiller, 2010). In fact, land confiscation is the most common complaint registered by Chinese farmers, followed by village finances and environmental pollution (Xinhua, 2007). Statistics vary regarding the number of takings but suggest they have been increasing in frequency. For example:

- From 1990-2002, approximately 66 million farmers lost their land because of "collection of land" (zhengdi) for resale and development purposes (Li, 2009).
- The number of illegal land confiscations by local officials rose by approximately 2 million per year from 1999-2009, for a total of 40 million by the end of that time period (Lee, 2009).
- Based on a 2003 survey of 1,100 villages in 12 provinces, reported incidents of villages experiencing land takings increased from 18-19% of villages during 1995-2000 to 29% of villages during 2001-2003 (Deininger et al., 2004).

It is important to distinguish between perceptions of takings and actual takings based on the law. According to law, the State has the authority to expropriate land "for the public interest" and with compensation. The law does not define the "public interest," which makes it very hard to challenge expropriations and effectively gives the State *carte-blanche* to purchase and develop land as it sees fit. However, expropriation can become illegal and may constitute a taking, if compensation is less than the amount required by law¹¹² or if collective land managers sell land to the State without following decision-making procedures established by law.¹¹³ As one example of a taking, residents in a village in Zhejiang Province learned that their village committee had sold land to developers only after bulldozers started leveling a nearby hill (Radio Free Asia, 2009). Takings vary across the country and correlate to development opportunities. Accordingly, they are more common along the coast, where there is higher demand for development, than in the remote areas of the country (Deininger et al., 2004).

Local governments have strong incentive to develop land, through takings or legal mechanisms, because it has become a major source of revenue. From 1987-2006, income from land sales by local government rose from less than 0.1% of total local government revenue to 35% of total revenue (China Translated, 2009). Chinese law requires that all commercial development occur

¹¹⁰ It is unclear whether the actual number of villages experiencing takings increased, or whether village inhabitants simply became more vocal in the 2000s.

¹¹¹ Land Administration Law Article 2

¹¹² Land Administration Law Article 47

¹¹³ Organic Law of the Villagers Committees (1998)

on state-owned land, not collectively-owned land, ¹¹⁴ and typically local governments expropriate land from collective land managers at a much lower price than for what they sell it to developers. For example, in Zhangjiakou City, Hebei Province, more than 3,000 mu of land was collected in 2009 for the purposes of real estate development. The county land and resources bureau offered villagers 7,000 RMB/mu, while the real estate developer paid the bureau more than 45 times that amount—320,000 RMB/mu (Ren & Zhao, 2010). Similarly, 330 mu in the Daxing district of Beijing was collected for a compensation fee of 5,000 RMB/mu and sold to PetroChina for 38 times that amount, at a price of 191,200 RMB/mu (Wu, 2010). If and when developers in turn sell their projects, the government earns additional and significant revenues through the land value appreciation tax. In 2009-2010, this tax constituted the single largest source of local government revenue (CCTV, 2010).

One possible solution to "land grabs" is allowing peasants to sell their use rights directly to developers. Another is clearly defining the "public interest." The government is taking action on these fronts. In January 2011, the State Council issued an Urban Takings Regulation on takings of private houses in cities. These new regulations include higher compensation standards, a narrower definition of "public interest," and more procedural rights for affected individuals. It is widely expected that the revised Land Administration Law, which is undergoing revision, will absorb these and other improvements (Zhu K., 2011).

B. Enforcement, de jure and de facto

There is a very large discrepancy between the official and actual land rights of households. Variable documentation of ownership and use rights, the lure of development profits, and, as this section describes, variable enforcement, have combined to create a system where the potential gains of illegal land deals outweigh the risks. Like so many other aspects of Chinese land tenure, there is a difference between *de jure* and *de facto* enforcement. The laws expressly address enforcement, but as one author observes, ". . . the problem in rural China is not bad legislation but enforcement. No number of new laws and procedures passed—no matter how elegantly rewritten—can improve their enforcement" (Lee, 2009). For land protection projects, it is important to understand both the law and practical realities of enforcement in terms of responsibilities, penalties, and dispute resolution.

1. Responsibility

Responsibility for enforcement typically falls to counties but can also fall to other administrative divisions depending on the situation. Villages or townships may, for example, help resolve disputes involving individuals. The specific bureaus involved in enforcement and dispute resolution depend in part on the land use. For example, farming and animal husbandry bureaus (i.e., within agriculture bureaus) are responsible for grasslands while forestry bureaus are

¹¹⁴ Land Administration Law Article 43. Specifically the law states, "Any unit or individual that needs land for construction purposes shall apply for the use of land owned by the State according to law, except land owned by farmer collectives used by collective economic organizations for building township enterprises or building houses for villagers or land owned by farmer collectives approved according to law for use in building public facilities or public welfare facilities of townships (towns)."

responsible for forests. At the same time, the law also requires the land administrative departments (i.e., within the land and resources bureau) to supervise and examine violations to the Land Administrative Law.¹¹⁵ The potential for multiple agencies to be involved makes it challenging to know who has ultimate responsibility for enforcement. In any case, unresolved disputes may be escalated to the courts.

The law encourages the policing of forests and grasslands. The Forestry Law encourages local government to assign forest guards to patrol the forest and stop illegal activities within "forest protection responsibility areas." The Grassland Law states that local government "shall make efforts to build competent contingents of law-enforcing officers and help raise the political and professional quality of the grassland supervisors and inspectors." 177

Those responsible for enforcing the rules do not always do so, partially due to diffuse responsibility, as described above. Furthermore, bribery is a normal part of business in China (Mattis, 2008). Corruption and bribery are on the rise, though the courts prosecute at least some offenders. From 2003-2010, the number of cases involving government officials increased by 13%. In 2009, there were more than 32,000 bribery cases, some of which involved billions of RMB (Zhang Y., 2010).

2. Penalties for Violations

Chinese law describes many circumstances that authorize or require the government to issue penalties; whether responsible officials accept bribes in their stead is another story. In any case, breaches of contract, illegal requisitions of land; and the use of land for non-approved purposes (see Chapter VIII, Use Rights) may invoke criminal investigation and could require fines, prison time, forced labor, and/or payment of compensation for damages. Penalties apply to any offenders, including, but not limited to, government employees. For agricultural lands, the law delineates penalties based on the manner in which they are converted or used for non-agricultural purposes. For grasslands, the law describes consequences for withholding or misappropriating grassland improvement funds; illegal transfer, use, reclamation, or requisition of grasslands; and failure to restore grasslands if the government requires such. For forests, the law emphasizes the ramifications of illegal harvest and other illegal commercial timber activities.

¹¹⁵ Land Administration Law Article 66

¹¹⁶ Forestry Law Article 19. The law also identifies "forest public security organs" responsible for the "maintenance of social order" and an "Armed Forest Police Force" whose duties are to prevent and extinguish forest fires and embark on rescue operations. The law does not specify whether these three entities—forest guards, forest public security organs, and Armed Forest Police Force—are three separate entities or one in the same.

¹¹⁷ Grassland Law Article 56

¹¹⁸ Criminal Law Articles 228 and 410, which are attached as an appendix to the Land Administration Law

¹¹⁹ Rural Land Contract Law Articles 59-61, Land Administration Law Article 70

¹²⁰ Land Administration Law Articles 73-84

¹²¹ Grassland Law Articles 61-72

¹²² Forestry Law Articles 40-44

3. Dispute Resolution

In 2010, the Central Government put into effect the Law on the Mediation and Arbitration of Rural Land Contract Disputes. This law expands upon the dispute resolution procedures identified in the Grassland, Forest, Rural Land Contract, and Land Administration laws. It explains that parties involved in a dispute have the option of resolving the issue amongst themselves or requesting meditation by the villagers' committee, the township government, or another government-sanctioned entity. If negotiations fail, the next step is to apply to the "rural land contract arbitration commission" or to file a lawsuit in the people's court.¹²³

The effectiveness of this new law is to be determined, but as with any law, it is only as good as its implementation. And implementation of dispute resolution procedures has, historically, been substandard. Many farmers are "gravely" unaware of their rights, including options for dispute resolution (Zhu & Prosterman, 2007). Those who seek relief may or may not find it. As one article describes, "Many peasant farmers go to Beijing to file petitions and complain to higher government offices about their losses [of land]. But local governments often set up checkpoints to block the petitioners, or send officials to Beijing to round them up and lock up the leaders when they return home. Other villagers seek legal help, but even if the court rules in their favour, the rulings are sometimes totally ignored and the bulldozers continue to roll in" (Griffeths, 2005). Another challenge is that judges are not always neutral parties, as local government officials hire, pay, and fire them (Cohen, 2006).

¹²³ Law on Mediation and Arbitration of Rural Land Contract Disputes Articles 3 and 4

X. OTHER TENURE FACTORS AFFECTING LAND PROTECTION

A. Funding for Land Protection and Management

Rarely are detailed budget numbers publicly available in China. However, the limited figures available suggest that funding for environmental protection is substantial and is generally increasing. For example:

- China is investing upwards of 1 trillion RMB (approximately US\$142 billion) to implement ecological conservation and restoration programs such as Grain to green and the Natural Forest Protection Program (see Part 1, Lay of the Land).
- The Central Government's expenditures on environmental protection activities increased by 19% from 2008-2009, from 104 billion to 124 billion RMB. The amount spent on environmental protection as a percentage of total government spending decreased slightly over the same time period, from 2.9% in 2008 to 2.8% in 2009 (Shik & Yim, 2009). Presumably these statistics include expenditures by agencies such as the Ministry of Environmental Protection and the State Forest Administration. They include funding for land and protected area management and a host of other activities such as pollution prevention.
- The budget for the Sichuan Environmental Protection Bureau increased from 44 to 490 million RMB from 2004-2008 (Figure 2–18).

While overall expenditures on environmental protection are not insignificant in China, those for protected areas may be low compared to other countries. There is little up-to-date or reliable global data on protected area funding; according to IUCN, the most recent global survey of protected area budgets was published in 1999 and was based on data collected in 1993 and 1995 (Emerton et al., 2006). In any case, this survey identified an average global budget for protected areas of \$893 per km² (in 1996 US\$), with the mean for developed countries totaling \$2,058 per km2 and the mean for developing countries totaling \$157 per km² (James et al., 1999). This survey was not able to publish figures for China due to insufficient data. However, based on a separate survey of 85 nature reserves, a different source estimated that China's average protected area funding totaled \$113/km², with local reserves receiving only \$53/km² (Liu, et al., 2003). In other words, the funding for China's nature reserves was approximately 13% of the global average and less than the average for developing countries.

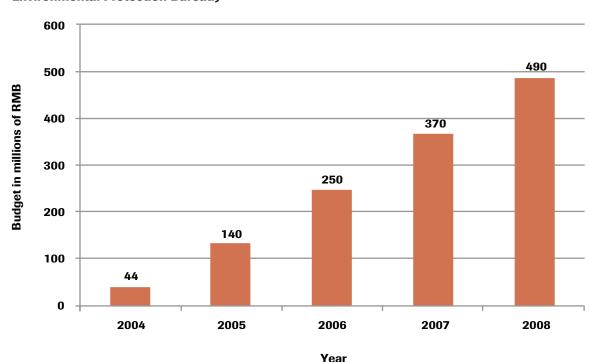


Figure 2-18. Budget of the Sichuan Environmental Protection Bureau, 2004-2008 (Sichuan **Environmental Protection Bureau)**

The main agencies involved in the budget process include land management agencies (e.g., State Forestry Administration), the National Development and Reform Commission, and the Ministry of Finance. The NDRC and the Ministry of Finance work together at each level of government (county, prefectural, provincial, and Central) to authorize project lists and budgets, and allocate funding to all the agencies within the State Council. Technically, the National People's Congress and the Local People's Congresses have ultimate budget approval authority.¹²⁴ However, in practical terms the legislative approval "remains largely a formality" primarily because the NPC has very limited time to review the budget. Thus, the State Council and its agencies more or less develop, approve, and execute their own budgets (Deng & Peng).

There are two main budget cycles—annual budgets and five-year budgets associated with each Five-Year Guidelines. The Five-Year Guidelines identify overall funding priorities and approximate budgets, while the annual budgets identify the year-to-year anticipated revenues and expenditures. The government may also fund projects independently of either process, particularly in the event of unanticipated budget surpluses.

China's fiscal year runs from January 1 to December 31. For the annual budget process each land management agency, at each level of the government, creates an annual project list and budget request. Typically the agencies start building their budgets in October. The agency submits the request both "up" within any one agency and "across" to the same-level finance bureau and

¹²⁴ Budget Law (1994)

NDRC bureau. Similarly, the funding allocations go "down" the levels of government within any one agency and "across" from the Ministry of Finance to the NDRC to the land management agency within any one level of government (Figure ___). For example, a county-level nature reserve managed by a county forestry bureau would request funding "up" from the prefectural or provincial forestry bureau, as well as "across" from the county-level finance bureau and county development and reform commission. The exact funding path and how far "up the chain" the funding request must travel depends on the nature of the project (Zhao, 2010).

Figure 2–19. Generalized path of funding requests and allocations, using the State Forest Administration as an example land management agency

Central government	Ministry of Finance	NDRC	State Forestry Administration (SFA)
Provincial government	Provincial Finance Bureau	Provincial DRC	Provincial Forestry Bureau
Prefecture government*	Prefectural Finance Bureau	Prefectural DRC	Prefectural Forestry Bureau
County government	County Finance Bureau	County DRC	County Forestry Bureau
	+ -		Regu

B. Protected Species

Different government entities have developed several lists of species warranting protection: State Key Protected Species lists, Red Data Books, and the China Species Red List (Table 2–7). There is overlap between these lists, though they are based on different classification schemes and, as a result, identify different species and numbers of species.

From a legal perspective, only the State Key Protected Species lists have any "teeth." Policies such as The Law on the Protection of Wildlife (1988) and the Regulations on Wild Plants Protection (1997) pertain to the Key Protected Species lists. If, for example, a proposed construction project would impact a species on the State Key Protected Species List—or its habitat—the developer must describe the possible effects in an Environment Impact Assessment (EIA), in accordance with China's EIA Law (2003). The local environmental protection bureau would then review the EIA together with the wildlife protection agency (i.e., forestry bureau and agriculture bureau) to evaluate the potential effect and prescribe actions to minimize impacts before deciding upon project approval. In reality, however, this process rarely, if ever, results in modifications to construction plans. The other species lists have no official legal function, but they may aid in the formulation of new legislation and in enforcement of existing laws.

Table 2–7. Government-created lists of species warranting protection

Title	Author	Year of release	Classification
The State Key Protected Wild Animals List	Joint effort by the State Forestry Administration and Ministry of Agriculture	1989	Classifies 256 species and genus/class/orders as protected as either Class I (96) or Class 2 (160)
The State Key Protected (same) Wild Plant List		1999	Classifies 419 species are identified as either Class I or Class II(same as above)
China Red Data Book of Endangered Animals			Based on IUCN Red List guidelines, classifies 533 species (birds 183, mammals 133, amphibians and reptiles 125, fishes 92) as extinct (EX), extirpated (ET), endangered (E), vulnerable (VU), rare (R) or indeterminate (I)
China Red Data Book of Rare and Endangered Plants	Ministry of Environmental Protection together with the Chinese Academy of Sciences	1992	Based on IUCN Red List guidelines, classifies 388 plant species as endangered (121), rare (110), or vulnerable (157).
China Species Red List Biodiversity Working Group of China Council for International Cooperation on Environment and Development		2004	Based on IUCN Red List guidelines, includes 10,211 species including 5,803 animals (mammals, birds, amphibians and reptiles, fishes, insects, mollusks) and 4,408 vascular plants

C. Autonomous Areas and Minority Populations

More than 60% of China's territory is inhabited by minority populations, although recognized ethnic minorities comprise just 8% of China's population (National Bureau of Statistics, 2011). Ethnicity (民族, minzu) is an important aspect of modern Chinese society and can affect land protection efforts. Given the vast areas inhabited by ethnic minorities and the high conservation value of many minority autonomous administrative areas, ethnicity and ethnic autonomy is likely to be a significant aspect of land protection projects. Despite China's unitary political system, including universal state land ownership and largely uniform land use law, the presence of ethnic minorities or the ethnic autonomy status of a project location may require accommodations to local customs and conditions. Local language use, spiritual traditions, and potential ethnic tensions and sensitivities must be taken into account.

All citizens are assigned one of the 56 officially-recognized ethnicities upon birth, the majority being identified as Han (Figure 2–20). Han Chinese are generally recognized as being descendents of the early Chinese dynasties, particularly the Han Dynasty (202 BCE to 220 CE), which were located in current Central China. Populations of ethnic minorities vary considerably in numbers and distribution (Table 2–8). Some live in small and dense communities, while others inhabit vast areas in different parts of the country. As of the 2010 census, the majority of ethnic minority individuals lived within China's five autonomous regions. These regions are comprised entirely of autonomous jurisdictions including most of China's 30 autonomous prefectures, 120 autonomous counties (known as "banners" in Mongolian areas), and more than 1,200 ethnic townships. Each administrative area at the regional, prefectural, county, and township level is named after its geographical location and the most dominant ethnic group; for example Xinjiang Uygur Autonomous Region is the provincial-level administrative unit that includes all of Xinjiang and is inhabited mainly by the Uygur ethnicity.

Outside of the five autonomous regions, 11 (non-autonomous) provinces contain one or more autonomous areas at the prefectural, county, or village level. They are located mainly in the south and northwest of China as well as in the northeast; examples include Deqing Tibetan Autonomous Prefecture in Yunnan and Yanbian Korean Autonomous Prefecture in Jilin Province (Central Government, 2005). In addition, although autonomous areas are established only if a dense community of the titular ethnicity is present, in most of the autonomous areas other ethnic groups have a significant presence and may even constitute the majority of the population. For example, in Ningxia Hui Autonomous Region only about 35% of the population are Hui Muslims, while the remaining 65% is comprised of mostly Han Chinese.

¹²⁵ From 1949-1979, the Communist government completed a national-scale ethnic categorization project. Of the 400 groups considered, the government identified 56 unique nationalities (Central Government, 2005). Using language, physical appearance, cultural habits, and occupation, as well as historical data, ethnologists decided whether each group should be considered as separate from the Han majority, and then whether it was an ethnicity of its own or part of another minority group (Fei, 1981).

Figure 2–20. Tibetans, such as this woman in Qinghai, are one of 56 officially-recognized minorities. Photo by Li Baoming



The government may designate autonomous areas in "areas where people of minority nationalities live in compact communities." This compact community requirement does not have a legal definition, but in practice it means that the ethnic community can be clearly discerned from other ethnicities by living arrangements or other segregating conditions. The area inhabited by such a community is granted a level of social, cultural, and economic autonomy. For example, the Qapqal Xibe Autonomous County exercises autonomy for the Xibe people, even though it lies within the Illi Kazakh Autonomous Prefecture (which is managed largely by the Kazakh people and promotes Kazakh language and culture), which in turn is part of the Xinjiang Uyghur Autonomous Region (which is managed by the Uyghur people and promotes Uyghur culture and language). At each level these different ethnic groups enjoy a level of fiscal and cultural autonomy, such as dedicated media outlets and some education in their language. While the degree and exact meaning of autonomy is unclear, the continuous establishment of autonomous areas, even after no new ethnicities were recognized, suggests that ethnic autonomy is seen as preferable by local governments (Gladney, 2004).

¹²⁶ Constitution of the P.R.C. Article 4

Many autonomous areas have unique land use history and patterns. All five autonomous regions are marked by environments that are adverse to human habitation. Tibet, Guangxi, and parts of Xinjiang are high alpine regions, whereas Xinjiang, Ningxia, and Inner Mongolia are very arid. Unlike the rest of China, these areas are sparsely populated, with as few as 1.8 people per square kilometer in Tibet for example. Living standards and income levels in most minority areas are below those of the national average (Central Government, 2005) (Xinhua News, 2005).

Land reforms in autonomous areas tend to be delayed compared to the rest of the country. Most of the ethnic groups in northeast and the western China historically have been herders who managed their lands collectively. Prior to the establishment of the Communist government, the land was owned by big landowners, or, as in Tibet, by monasteries (Miller, 2005). The Communist government gradually transferred land to state and collective ownership. Unlike the drastic land reform in the 1950s in the non-autonomous areas of China, land ownership in most minority areas was reformed later and more gradually in a process called "democratic reform." Similarly, assigning land to individuals through individual household contracts in the autonomous regions started only after successful implementation in the eastern (non-autonomous) provinces (Miller, 2005).

Unique to the Xinjing Uyghur Autonomous Region, an important consideration for land use is the role of the Xinjiang Production and Construction Corps (also known as 兵团, bingtuan). The bingtuan is a military-organized farming and development organization. With approximately 2.5 million members, it is responsible for managing 7.5 million hectares of land for agriculture, forestry, and other purposes. Bingtuan land holdings are located throughout Xinjiang. Bingtuan reports directly to the Central Government but acts as local government in the areas under its jurisdiction, performing land use planning activities and farm land conservation (Entering Bingtuan).

Beyond land tenure and usage patterns, conservation in minority areas can affect, and be affected by, ethnic community values and interethnic relations. An example of ethnically-driven direct and positive conservation impact is Meili Snow Mountain, which is not only a major site for medicinal plant and harvesting of other non-timber forest products, but also a major sacred site and pilgrimage destination for Tibetan Buddhists, who are dedicated to protecting the mountain. Similarly, one of China's most famous protected areas, the Kekexili Nature Reserve, was established in 1995 after the film *Kekexili: The Mountain Patrol* publicized the efforts by a volunteer Tibetan vigilante patrol to combat the poaching of endangered Tibetan antelopes. On the other hand, political tensions within ethic groups locally, nationally, or even internationally can make non-governmental conservation work tenuous. Environmental groups have been known to ask members to resign for holding supportive attitudes towards "separatist activities" (Economy, 2004), and ethnic minority environmentalists have been found guilty of separatism, a charge punishable by imprisonment and possibly capital punishment (Reuters, 2010).

Table 2–8. Ethnic minority populations of more than one million people

The table does not reflect the 1.2 billion Han Chinese majority that lives in every province and region. Ethnic groups are arranged in descending order based on population size in the year 2000 (National Bureau of Statistics, 2000) (National Bureau of Statistics, 1990).

English Name	Chinese Name	Population in 1990	Population in 2000	Location
Zhuang	壮 族	15,489,630	16,178,811	Guangxi, Yunnan, Guangdong, Guizhou, Hunan
Manchu	满 族	9,821,180	10,682,263	Liaoning, Heilongjiang, Jilin, Hebei, Inner Mongolia, Beijing
Hui	回族	8,602,978	9,816,802	Ningxia, Gansu, Henan, Xinjiang, Qinghai, Yunnan, Hebei, Shandong, Anhui, Liaoning, Beijing, Inner Mongolia, Tianjin, Heilongjiang, Shaanxi, Jilin, Jiangsu, Guizhou
Miao	苗族	7,398,035	8,940,116	Guizhou, Yunnan, Hunan, Sichuan, Guangxi, Hubei
Uygur	维吾尔族	7,214,431	8,399,393	Xinjiang, Hunan
Tujia	土家族	5,704,223	8,028,133	Hubei, Hunan, Sichuan
Yi	彝 族	6,572,173	7,762,286	Yunnan, Sichuan, Guizhou
Mongolian	蒙古族	4,806,849	5,813,947	Inner Mongolia, Liaoning, Xinjiang, Heilongjiang, Jilin, Qinghai, Hebei, Henan
Tibetan	藏 族	4,593,330	5,416,021	Tibet, Sichuan, Qinghai, Gansu, Yunnan
Bouyei	布依族	2,545,059	2,971,460	Guizhou
Dong	侗 族	2,514,014	2,960,293	Guizhou, Hunan, Guangx
Yao	瑶 族	2,134,013	2,637,421	Guangxi, Hunan, Yunnan, Guangdong, Guizhou
Korean	朝鲜族	1,920,597	1,923,842	Jilin, Heilongjiang, Liaoning
Bai	白族	1,594,827	1,858,063	Yunnan
Hani	哈尼族	1,253,952	1,439,673	Yunnan
Kazak	哈萨克族	1,111,718	1,250,458	Xinjiang
Li	黎 族	1,110,900	1,247,814	Guangdong
Dai	傣 族	1,025,128	1,158,989	Yunnan